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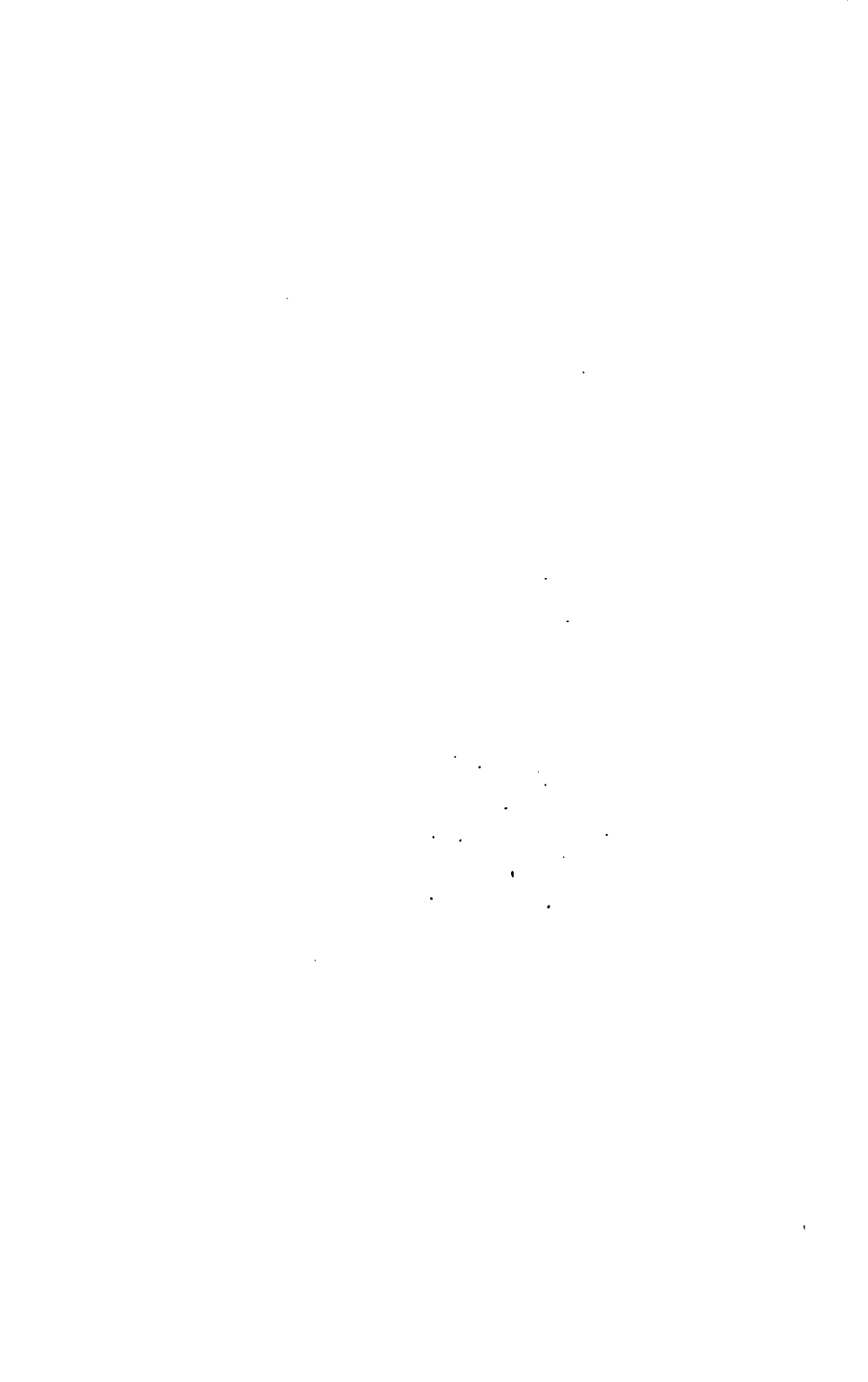






THE BRITISH
GYNÆCOLOGICAL JOURNAL.

VOL. V.



THE BRITISH GYNÆCOLOGICAL JOURNAL:

BEING THE JOURNAL OF

THE BRITISH GYNÆCOLOGICAL SOCIETY.

VOL. V.

EDITED BY

Fancourt BARNES, M.D.



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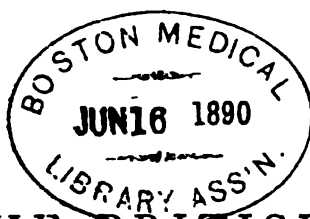
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THE BRITISH GYNÆCOLOGICAL JOURNAL

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MAY, 1889.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JANUARY 9, 1889.

ARTHUR W. EDIS, M.D., F.R.C.P., PRESIDENT, IN THE CHAIR.

ANNUAL GENERAL MEETING.

PRESENT: 30 Fellows, 9 Visitors.

The following were elected Fellows of the Society:—Dr. G. Apostoli, Dr. A. J. Smith, and Dr. J. T. Ashton.

The following were proposed for election:—Dr. Elias P. Case, Minnesota; Dr. W. C. Weathersby, New Orleans; Dr. Thomas J. Webster, Merthyr Tydfil; Dr. Abraham Wallace, Glasgow; Dr. Richard Eden Walker, Canada; Dr. W. Hamilton Merritt, Canada; Dr. Otto Eugen Keller, London.

Mr. LAWSON TAIT showed a large specimen, which was a curious parallel with that shown at the previous meeting by Dr. Bantock. The patient was a Welsh woman, aged forty-seven. The patient from whom Dr. Bantock had removed the tumour in question was also Welsh. It would be remembered that he, Mr. Tait, had opened the abdomen of Dr. Bantock's patient in 1880, and closed it without removing the tumour, on account of the appearance of malignancy. Curiously enough, he had also opened the abdomen of the last patient

in 1881 with the same result, viz., that he did not attempt its removal. The tumour had continued to grow, and ultimately she was sent to him again the other day. She was then of enormous size. He did not think he had ever before seen a woman quite the size she was. The specimen before them only gave a faint idea of the size of the tumour at the time of removal, because it had drained considerably. A facetious colonial, who was present at the operation; had suggested that he had not removed the tumour from the woman, but had peeled the woman off the tumour, so lean and small was the patient when freed from the mass. As for the details of the operation, it was impossible to give any idea of it. When he opened the abdomen he did not know in the least what he was going to find. The first thing he met with that he recognised was the transverse colon. Then he came across a lot of other structures, which turned out to be nothing more than ligamentous bands belonging to the tumour. The broad ligament was thicker than his wrist. There was no dipping into the pelvis. The intestines were the only other structures he recognised. He said that no four tumours he had ever removed presented anything like the difficulty of that one. He said it was perfectly certain that if he had opened the woman's abdomen a week or ten days ago, and found it as it was in 1881, he would not have attempted to remove it. The fact that he had successfully removed it on the present occasion showed what one could do when backed up by the confidence gotten of experience. One got to believe that there was nothing incapable of being successfully removed so long as it was not malignant. The tumour, when removed, weighed about 60 lbs. At present it only weighed about 40 lbs.

The second case was one of extra-uterine pregnancy. He had opened the woman's abdomen a few days ago without the slightest suspicion that it would turn out to be a case of extra-uterine gestation. The patient had been ill for some weeks. She had a vague tumour running up from the right kidney, with a good deal of pain. There was one point in the

history which ought, perhaps, to have put him on his guard, viz., that she had not menstruated for three months, but that fact he did not learn till after the operation, and it would not have helped him very much, for she was at least five months pregnant. When he opened the abdomen, the first thing he saw was a black gangrenous-looking mass, which he at once said was a rotated tumour which had become strangulated. Thinking it was an ovarian tumour, he separated the intestines, and at once came upon a mass of placenta. He then recognised that he was dealing with a ruptured broad ligament. He then demonstrated the relations of the parts upon a diagram. He removed the foetus. It was perfectly fresh, and although it gave no indications of life, yet it could not have been dead long. Then he came upon a very big mass of placenta adherent to the back of the broad ligament and to the intestines. He was thus called upon to make up his mind at once as to what he would do with the placenta. The case was one in which the conditions were fully as difficult as if the case had gone on to full time. He pointed out that when rupture of the sac took place, that is to say, the secondary rupture of the distended broad ligament, the placenta was liberated, and it set up attachments, and those attachments constituted the one unsolved point in the treatment of ectopic pregnancies. The point had been discussed at the Obstetrical Society by himself and others, but no definite plan of dealing with it had been arrived at. He alluded to the conclusions drawn up by Dr. Harris, of Philadelphia, in favour of the old plan. Dr. Harris had collected some twenty-six cases, not of the same kind and not by the same operators—in fact, without any of the community of circumstances without which such statistics were valueless. He objected to statistics compiled on such a base. Conclusions on a subject of so much importance could not be drawn from a jumble of cases. It must be done by some one accustomed to practise the operation, who would decide to perform one series of cases on one plan and then to perform a second series on the alternative plan. In his own series of cases he had tried leaving the placenta to

come away by suppuration. It was true that five out of six of the cases had recovered, but only after a very dangerous and exhausting process. Although the results were good, the risks were very great, and he was now of opinion that the policy was no longer to be recommended. He mentioned that Dr. Champneys, of St. George's Hospital, had tried another plan, viz., he injected antiseptic substances into the placenta, and then closed the wound on antiseptic principles. In that particular case the result had not been satisfactory, for the antiseptic system failed, as it always did. The placenta became gangrenous, suppurated, and finally caused the patient's death. The only surprising thing was that Dr. Champneys should have stood by for five or six weeks without opening the abdomen a second time. The plan appeared a good one, but only on condition that if the placenta suppurated it should be removed by a second operation. So far, therefore, the experiment remained incomplete. In the other of the three plans which had been adopted, Mr. Tait had made two trials. One occurred at Nottingham some months ago. It was the case of a foetus which had ruptured through into the peritoneum from the cavity of the broad ligament, and fresh adhesions of the placenta took place. There he operated, and removed the placenta from the intestines and other surroundings quite freely, and checked the hæmorrhage by means of the perchloride of iron. That brought him to the point under discussion at the Obstetrical Society. There Mr. Knowesly Thornton had agreed with Mr. Tait that, with the modern appliances for the arrest of hæmorrhage, they need not be afraid of removing it, as they were before. He could speak from practical experience in the matter. They would see that in this second case the placenta was a bulky one and the hæmorrhage was violent and could not be arrested by ligatures, which cut through the tissues, and seemed, if anything, to increase the bleeding. Perchloride of iron was then vigorously rubbed in over the bleeding surface equal in area to twice the palm of his hand, and the hæmorrhage promptly ceased. He put in a drainage tube, which was removed on

the third day, and the patient made an uninterrupted recovery. Returning to the alternative plans of treatment, he said that it was obvious that they must either close the abdomen and take the chance of a second operation, or they must adopt the more heroic, but, on the whole, perhaps the safer operation, of removing the placenta there and then, and trust to the perchloride of iron to check the hæmorrhage. He was certain now that Dr. Harris's conclusions, like his facts, were quite erroneous, and that the plan of letting the placenta come away by suppuration was absolutely unsurgical. He called attention to the curious fact that the foetus was malformed, having no arm on one side and only one finger, representing the whole limb, on the other.

The PRESIDENT said the question was one of considerable importance. Nothing was more puzzling than to open the abdomen and find something which one had not expected. He thought they were on the verge of a new departure in the application of the perchloride of iron for the arrest of the hæmorrhage after removal of the placenta.

Dr. DICKINSON explained that in Dr. Champneys' case he had injected the vessels of the placenta with boracic acid, which he hoped would prevent it becoming gangrenous. The patient went on very well for a month, and even got up one day, and her untimely end happened quite unexpectedly.

Mr. TAIT said that the patient had gone on all right until the thirty-first day. Then she had a rigor, and had symptoms which old-fashioned persons would call pyæmic.

Dr. BANTOCK said he could not allow the specimen to pass without congratulating Mr. Tait upon the success of the operation. He did not quite understand whether Mr. Tait had made a pedicle or not. He could quite understand that it was not possible to describe the steps of an operation of that magnitude. He might say that Mr. Tait was fortunate in having a patient with healthy kidneys. In his own case the patient had succumbed to Bright's disease six days after the operation. With regard to the case of extra-uterine pregnancy, the salient point in the operation

appeared to be the treatment of the placenta. He had never been fortunate (or unfortunate) enough to meet with a case of that kind, in which it was necessary to remove the placenta along with the foetus, which had escaped from its bed in the Fallopian tube, but he had long felt that if he came across such a case he should not leave the placenta to come away by a sloughing process. He had seen one operation for the removal of the foetus at full time, and the placenta there was a source of trouble, and ultimately the cause of the patient's death. He thought that if the placenta had been removed, and the hæmorrhage arrested by perchloride of iron or matico, they might have had better results than had hitherto been obtained. He had long felt that it was a mistake to leave the placenta to suppurate away, with all the risks incidental thereto. He could not agree with the suggestion to leave it and trust to chances. It was impossible to say what would become of a large mass of lowly-organised tissue like that of the placenta. There was one other point: He did not understand Mr. Tait's reference to the removal of a foetus which was supposed to be extra-uterine. He gathered that he would perform the operation at any time as soon as the condition was diagnosed. Hitherto his impression had been that if the pregnancy went on beyond the fourth or fifth month that he would then allow it to go on until full time, prepared, of course, to operate before the death of the child, as circumstances might determine. He would be glad if Mr. Tait would answer the question as to what he would do in such a case.

Dr. HEYWOOD SMITH said that Dr. Bantock had anticipated two questions he was about to put to Mr. Tait. He asked Mr. Tait whether the pedicle was merely uterine tissue, or whether he had to sew together some peritoneal flaps, as in Dr. Bantock's case. With regard to the case of ectopic pregnancy, he asked whether anybody had had any experience of matico as a styptic in similar cases or in pelvic oozing. Of course one had to speak with a certain amount of deference in the presence of the introducer of

perchloride of iron as an uterine styptic, but there could be no doubt that in certain cases where the perchloride was used it sent up the temperature. He asked whether Mr. Tait had noticed anything of the kind. Bearing on that point, he had a case the other day in which he had found it impossible to remove a small fibroid on account of adhesions, and in which there was some smart hæmorrhage. He had introduced a drainage tube, and the fluid that came away was almost pure blood. As it did not seem inclined to turn to serum after twenty-four hours, he threw in some tincture of matico, and the hæmorrhage soon ceased. He suggested that, in the case related by Mr. Tait, a strong solution of matico might have arrested the hæmorrhage with perhaps less risk than the perchloride of iron.

Dr. BARNES said that it must be at least ten years ago since he was called to a case of an ovarian cyst that had burst at Islington. The case was operated upon immediately. There were very extensive adhesions, giving rise to profuse bleeding. There were no vessels to be seized. He swabbed the surface over with the perchloride of iron, and the bleeding was immediately checked. The woman made a perfect recovery. There was no rise of temperature in that case. He had repeatedly used it to bleeding surfaces. Matico might offer some advantages, but the general consensus of opinion in favour of the perchloride of iron was remarkable. There had doubtless been fatalities attending the perchloride, but it was often a question of using a powerful remedy or none at all. Of course if the woman were left to die of hæmorrhage, she would not die of the perchloride. In many of the fatal cases death occurred in spite of, and not on account of, the perchloride. This had been used unskilfully or too late.

Dr. FENTON, alluding to the deformity of the foetus in Mr. Tait's case, asked whether that was Mr. Tait's experience in dealing with children who had gestated outside the uterus, and whether that would not be an additional reason for not waiting for them to arrive at a viable age before releasing them from the cavity.

Mr. TAIT, in reply, said that it was the only deformity he had seen in connection with an extra-uterine pregnancy. The idea was general, but he could not imagine where it came from. He mentioned several instances of ectopic children whom he had been the means of bringing into the world who were perfect in mind and in body. In any case, he said, it was impossible to tell whether they were deformed or not until they were taken out of the body, so that he did not see how it was likely to help them. So long as an ectopic gestation was going on after the period of primary rupture without risk to the mother, he would certainly not interfere. With respect to the perchloride of iron, matico might have the same effect, but he was not going to give up a faithful servant in favour of an untried one. The perchloride of iron had fully answered his purpose, and he would leave it to some one else to do the experimenting in any further direction. He had applied the perchloride to wounds and lacerations of the liver, and pretty nearly every viscus in the abdomen, and he had never had any trouble. One advantage was that it made such a thin film. If they washed out the loose perchloride there was no danger. Of course if they left it in, a patient would be poisoned with the perchloride just as with any other poisonous salt. There was no pedicle. The removal of the tumour was an instance of the usefulness of the temporary rope elamp. He used two of them. The reflexion of the peritoneum was on a level with the lower part of the kidneys, and he got the rope clamp round and pulled down what he could, and thus manufactured a pedicle. The operation took about an hour.

In reply to an invitation by the President to define exactly what course he really pursued in the treatment of extra-uterine gestation, he said that at the time of rupture the risks were so great that immediate interference was demanded. If, however, the pregnancy had gone on after the date of rupture, say the fourth or fifth month, and the gestation was going on without apparent risk to the mother, there was no ground for interference at all until the viable time.

Dr. DINGLE showed a specimen removed from a patient

eight days before. She had been under observation for some days. She was first seen by him on December 28th, and said she was about seven months pregnant. That she evidently was. Her abdomen was enormously distended. In fact, he thought she was more advanced. He also considered there was a tumour present. He could not hear any foetal heart sounds, but she said she thought she felt foetal movements. When labour commenced he was out, and his assistant attended the case. He ruptured the membranes, and the child came down in the ordinary position and was living. He, however, could not get it any further, and he therefore sent for Dr. Dingle, who arrived just as the mass, which he showed the Society, was expelled. It was what was called a sacral tumour; part of it was covered with skin, and there was some bony tissue. The patient had had five healthy, well-formed children. The placenta was quite double the ordinary size.

Dr. FANCOURT BARNES mentioned that it was not an uncommon thing for these sacral tumours to contain hair and cysts.

Dr. EDIS thought it would be well to have a further report of the pathology of the specimen.

TREASURER'S REPORT.

Dr. BANTOCK, Treasurer, then read the Financial Report for the past year. He said he hoped the Society would find it a satisfactory report, but he wished to call attention to one point, and that was in respect of the arrears. He regretted to say that it was very difficult to bring men up to the point in the matter of paying up their subscriptions. He had done his best, but although he had succeeded to a large extent, he was by no means satisfied. They might derive a certain amount of consolation from the fact that at the same time last year there was over £370 owing, while this year the amount had been reduced to £318. He would be very glad if he could impress upon the Fellows generally the necessity for paying up their subscriptions when they became due. He mentioned that last year some fifty-seven of the founders of the Society

had never paid anything, but he had been successful in reducing that number to twenty-three. He then read the items of the report.

Mr. LAWSON TAIT, in proposing the adoption of the report, said that when he looked back upon the first meeting in that room in 1885, and reflected that they had now £500 saved and put by, and 540 members, he was delighted beyond measure. He said that such a success was unexampled in the history of any society with which he was connected. While deploring the arrears, he could not help feeling that their success had been more than they expected, though perhaps not more than they deserved; certainly much greater than some of their friends had either anticipated or wished. Had he been treasurer, he thought he would have prepared a budget for the future. As to the arrears, he did not see why proceedings should not be taken to recover them. He would suggest that in future they might safely tend to limit their fellowship by inflicting an entrance fee. He would also increase the price of life memberships. He had always noticed that when men had paid an entrance fee they were much more careful to avoid placing themselves in the reach of the possibility of having to pay it over again.

Dr. FENTON, in seconding the motion for the adoption of the report, said that he thought in many cases the arrears were due to mere carelessness, and suggested that Fellows should be requested to give an order on their bankers to pay the amount regularly. He could quite understand that with the manifold occupations of their Treasurer he could hardly be expected to make repeated personal application to the Fellows.

Dr. BANTOCK said there were still twenty-three of the original members who had paid nothing at all. Referring to Dr. Fenton's remarks he assured them that every member of the Society whose name appeared on the list of arrears had received a personal communication, and, indeed, no one could complain that he had not been applied to for his subscription. He had reduced the number of Fellows who had not paid their

subscriptions from 190 in 1888 to 140 at the beginning of 1889.

Dr. BEDFORD FENWICK thought it was only fair to say that he had to look over the accounts, and he had been surprised at the hundreds of letters written by their Treasurer to recalcitrant fellows.

Dr. SOUTTER suggested that repeated applications should be made to the Fellows who had not paid their subscriptions, and as for the disgraceful "originals" who had never paid anything, he would vote that they be excluded from the Society. He asked how the Treasurer managed to get the odd pence in his receipts, seeing that the subscription was a guinea. He said that he had not received an application from the Treasurer, perhaps because he was not in arrears. He thought a printed circular was not enough to send to Fellows in arrear. It required a written letter with the autograph of the Treasurer.

Dr. BANTOCK replied to Dr. Soutter that the odd pence represented loss on foreign subscriptions.

In the absence of Mr. Lawson Tait, Dr. Bantock proposed an alteration in Rule No. 1, Section VI.

He explained that by increasing the number of metropolitan members on the council it would obviate the difficulty sometimes experienced in getting a proper attendance at the meetings of the Council.

Dr. PURCELL seconded the motion.

Dr. HEYWOOD SMITH proposed, as an amendment, that the words "not more than," contained in the proposed alteration in the rule, be changed to "not less than," so that if deemed advisable the proportion of metropolitan members might be still further increased.

Dr. FENTON observed that sixteen out of twenty-four were men living out of London, the nearest being Brighton and the farthest away residing at Calcutta. He said it was an absolute impossibility for those men to attend any ordinary meeting, and that it was a bad plan to choose men living so far away.

The amendment was then agreed to, *nem. con.*

The PRESIDENT then called upon the scrutineers to hand in their report of the ballot for officers. According to this the seventeen officers proposed by the Council had been almost unanimously elected.

The retiring president, Dr. EDIS, then delivered his valedictory address:—

GENTLEMEN,—Having now fulfilled to the best of my ability the duties of the office you so kindly entrusted to me a brief twelvemonth ago, it remains only for me, in accordance with the custom of my predecessors, to place before you a short account of the work done during the past year; to acquaint you with our position financially and numerically, and then to resign into your hands the trust you confided in me on my election as President.

You have just heard from our Treasurer a most satisfactory report of our financial position, and I feel sure I but express the sentiments of other Fellows of the Society in saying that we are greatly indebted to Dr. Bantock for his energetic and business-like method of conducting its affairs. I can but hope you will do all in your power to lessen his labour of love by sending in promptly your annual subscriptions, and thus saving him all unnecessary correspondence.

The number of those who have joined our Society is steadily increasing, and it is gratifying to notice that our foreign contingent is annually enlarging, showing clearly that the Society is thought well of, not only at home, but also abroad.

The full roll of Fellows now exceeds 540. When I mention that one of our most valuable and energetic societies—the Clinical—after twenty years of healthy and active existence only now numbers 495 members, the inference is plain that the foundation of our own Society has met a long-felt want.

Although our ranks have been steadily increasing, we have yet to deplore the loss of some who have been called away.

Early in November, one of our most active and esteemed Fellows, and a Vice-president of the Society, John Chalmers, M.D.Glas., succumbed to septicæmia.

About nine years ago, while attending one of the poorest class of midwifery patients, he poisoned his finger with that most loathsome disease which works such ravages in the human system. Constitutional symptoms developed themselves which greatly impaired his general health, and which resulted in that most insidious affection of the nervous system—locomotor ataxy.

This misfortune he bore with manly fortitude, and seemed at length to have partially recovered, so much so that he was a frequent visitor at our evening meetings here.

A trivial lesion from a suppurating corn excited cellulitis and gangrene of the foot, to which his impaired vigour rapidly succumbed.

His contributions to our Transactions were always marked by extreme conscientiousness. His very earliest case of sloughing of the vagina after confinement, with septicæmia, was thus spoken of by our first president:—"It was just the kind of paper which he had in his inaugural address ventured to hope might often be brought before the Society, the record of a carefully observed case, with its clinical phenomena well and accurately described, and the therapeutical indications and results graphically and minutely observed and told."

In attempting to give even a brief review of the work done during the past year, it will be impossible to mention even all the various subjects which were brought before our notice. One important feature of this Society has been the exhibition and discussion of recent specimens, and I cannot but think we have done wisely in carrying out the suggestion of its founders, and not limiting, as is too often done in other societies, the time for their consideration, inasmuch as the exhibition of specimens is often more calculated to raise discussion upon matters of practical interest to the busy practitioner than the mere listening to lengthy contributions better adapted for quiet perusal in the pages of our medical journals.

When discussing the prospects of the Society with our unsympathetic critic, he raised the objection that we spent the greater part of our time in discussing pathological specimens,

not in listening to lengthy scientific papers. If any reply were needed to rebut such a statement, could anything more telling be advanced than the splendid array of specimens exhibited by Mr. Lawson Tait on the subject of ectopic gestation, closely following as it did the discussion of Dr. Aveling's paper on the same subject. The mere fact of seeing such a collection could but impress the practitioner with the reality and importance of the condition; and when we further learnt that of forty-two consecutive cases of operation by laparotomy performed by him in cases of ectopic gestation at the time of rupture, no less than forty of these recovered, our belief in the triumph of abdominal surgery was abundantly confirmed.

Our late president, Dr. Bantock, has presented us with such a numerous array of specimens that it is impossible to individualize them, and yet at the same time impossible to pass them over without notice, seeing how much they have contributed to our instruction, and to what interesting discussions they have given rise.

To begin with almost the last, he presented a huge fibroid tumour, weighing sixty-seven pounds. Unless actually seen, anyone unfamiliar with the strides which modern abdominal surgery has made during even the present generation would not deem it credible that any operator would be bold enough to remove such a mass from a living woman with any prospect of success.

The value of specimens exhibited would be materially enhanced if more stress were laid on the clinical aspect of the question than is often the case; and further, that where specimens recently removed have been shown at our meetings, the subsequent history of the progress of the case would prove of much interest to many of our Fellows.

It has been to me personally a disappointment that we have had so few contributions from men engaged in the busy routine of every-day practice as to the influence of remedies and other modes of treatment other than operation. We have yet much to learn in this direction. Every uterine case is not necessarily one for operation, and the more adept we become

in the science of our art the greater the number of expedients can we resort to in preventing cases going on to the necessity for operative interference. Doubt has recently been thrown by one personally well able to give an opinion, Dr. Lombe Atthill, of Dublin, on the action of certain drugs on the utero-ovarian system. He asserts that such remedies as ergot, quinine, and strychnia—three of the most potent of the so-called emmenagogues—have no appreciable effect on the unimpregnated uterus, do not produce any contraction of the uterine muscular fibre, or if they do, the stimulation and contraction of the fibre has no effect in the production of menstruation.

He further states that in cases of menorrhagia and metrorrhagia, putting aside those cases which depended for their origin on abortion, pregnancy, or parturition, the medicines known as astringents might at once be discarded as useless.

Neither tannin, tannic, or gallic acid, nor any of the mineral acids or any other astringent had any effect whatever in these cases; indeed, their administration was worse than useless—was probably injurious.

Surely there are many amongst our Fellows who could from their experience in every-day practice controvert or confirm such statements.

Early in the year Dr. Aveling contributed an interesting paper on "The Diagnosis and Electrical Treatment of Early Extra-Uterine Gestation," which elicited a prolonged discussion.

The whole question hinged on the possibility of making a correct diagnosis. Difficulties do and must always exist, but Dr. Aveling contended that a comprehensive grasp of the history, and attention to the objective and subjective symptoms of each case, would, in most instances, leave little doubt as to the nature of the abnormal condition under examination.

Although extra-uterine gestation occurs in a far greater number of instances than might be imagined, the cases of its early detection are unquestionably few, judging from the published cases. This is a fact much to be regretted, and if the

discussion of the subject in this Society, and elsewhere, has the effect of quickening the perceptions of the practitioner to the possibility of detecting the condition in the very earliest stages before rupture of the sac occurs, one of the main objects of the Society will have been fulfilled and the progress of gynæcology advanced.

The main symptoms upon which we can rely in arriving at a presumptive diagnosis are the early symptoms of uterogestation, *plus* certain other well-marked phenomena, such as sudden and violent pain, generally referred to one or other iliac region, often producing profound prostration, with syncope, or even collapse. This pain may occur at a menstrual epoch, or may be induced by any undue exertion, coitus, straining at defæcation, or merely emptying the bladder. It is generally described as severe cramp or colic, and is only relieved by absolute rest, a hypodermic injection of morphia, hot applications, and taking off all tension of the abdominal walls.

Coincident with this, or coming on at irregular intervals, there is generally metrorrhagia, often leading to the supposition that the patient has miscarried, which may be still further accentuated by the passage of the decidual membrane. Not unfrequently there is much irritability of the bladder, with tenesmus or diarrhœa.

Apart, however, from the subjective symptoms, there are generally well-marked objective signs, if only they be carefully searched for, which sustain the validity of the diagnosis, viz., increased size of the uterus, with displacement upward, forward, or to one or other side, and the presence to one side of, or behind the uterus, of a cystic or circumscribed tumour, somewhat painful on pressure, less mobile than an inflamed or enlarged ovary, yielding to palpation, a sense of obscure fluctuation, and sometimes, though not necessarily, ballottement.

Examination per rectum often enables us to determine more accurately, even than *per vaginam*, the exact size and contour of the tumour, and should always be resorted to, but with great care.

And here I may be pardoned if I venture to remark that the sum and substance of practical gynæcology is not expressed by mere surgical treatment. What the practitioner finds most difficult to determine in any case is the diagnosis. This granted, the treatment is, comparatively speaking, simple. Only yesterday I saw a patient sent up from the country, the practitioner forwarding me the particulars of the case. The patient was aged twenty-nine, and single. After three months' observation of the case no diagnosis was arrived at. Within three minutes of my having seen her, I had no hesitation in pronouncing her about five months pregnant.

When one reflects upon the amount of mental anxiety the practitioner might have saved himself during all these months, could he only have arrived at a rational diagnosis of the case (apart altogether from the mortification he must now experience in learning how simple was its nature), we are surprised that more care is not exercised by those engaging in practice to fit themselves for the duties they ought to fulfil.

As to the treatment of extra-uterine gestation by electricity much diversity of opinion still prevails. Dr. Aveling considers it superior in every way to all others, and knows of no case in which it has failed, when properly applied. Dr. Thomas, of New York, says in the electrical current we appear to have an infanticide agent of reliable character, and in the early months should be preferred to the more radical and dangerous procedure of laparotomy.

Dr. Garrigues speaks of electricity in these cases as a method standing with a record unblemished by a single failure or any dangerous consequences. The pregnancy has been promptly interrupted, and every single patient has definitely recovered within a short time. He considers it *the* remedy, and that it is the duty of the physician to give his patient the benefit of its application.

On the other hand, Mr. Lawson Tait doubted the possibility of diagnosing a case of extra-uterine gestation before rupture of the tube had taken place, and even if the foetus were destroyed thought the placenta would continue to grow.

It would be difficult to summarise the discussion, but

although there was much diversity of opinion, there seemed to be a great dearth of facts. Still the discussion, which was extended over two meetings, was one of much interest, and could not fail to advance our knowledge of the subject.

Dr. Savage exhibited two ovaries, removed from a patient six days after her confinement, who was the subject of purulent peritonitis, which led to a most interesting discussion as to the management of these distressing cases. Extreme cleanliness, or according to some, antiseptics, had done much to lessen the frequency of so-called puerperal fever cases, but it was only comparatively of recent date that operators had been bold enough to open the abdomen, where purulent peritonitis was presumably present, remove the fluid and wash out the peritoneal cavity, draining or not, as might be indicated.

Dr. T. Inglis Parsons' paper on the action of the constant current on fibroid tumours was a useful contribution to our knowledge on the subject, and contained much that was new. From careful observation he concluded that: (1) electrolysis takes place at both poles; (2) that a chemical action secondary to the electrolysis also takes place at both poles, and appears to be most destructive at the positive pole; (3) that electrolysis does not appear to take place in the intervening space between the poles traversed by the current. This is distinctly an original observation, and had not hitherto been demonstrated.

A prolonged discussion followed, many of the prominent speakers being distinctly sceptical as to the influence of electricity. The subject must be considered to be still *sub judice*, and until we have more facts before us (carefully recorded facts extending over long periods) it will be impossible to form an impartial opinion as to the merits or demerits of electricity in the treatment of uterine tumours and other pelvic disorders.

Under the head of Clinical Reports Mr. Lawson Tait contributed a most valuable and interesting series of observations, viz., a research into the coincidence of irritation and menstruation. From a careful microscopical examination of ovaries removed by operation, the exact date of menstruation being known, he concluded that ovulation has nothing to do with

menstruation. Where the ovaries were either broken down by suppuration, occupied by cysts, or so altered by chronic inflammatory disease as to present nothing of the character of normal ovarian structure, no difference in menstruation resulted, nor does removal of the ovaries check menstruation in all cases. The process is often carried on for some considerable time after.

In cases of myoma and inflammatory disease of the Fallopian tubes, the function of menstruation is exaggerated, and always altered very materially; whereas, when the tube and uterus are not so affected, and the ovary alone diseased, no such alteration of menstruation is noted.

When there is disease of the tube and no disease of the uterus, menstruation is exaggerated, and correspondingly, when there is disease of the uterus and no disease of the tube, again menstruation is increased alike in frequency and quantity.

Of twenty-eight cases there were only three which went to show that menstruation and ovulation were coincident. On the contrary, there were seventeen cases which went to show that ovulation was continually progressive, but that it was not coincident with menstruation.

Dr. Robert Bell, in a paper on intra-uterine medication, thought the physiology, not to speak of the pathology, of the uterus and its appendages was far from being in a satisfactory condition.

He considered the uterus in a very large majority of cases was the *fons et origo mali* in a great many of the various affections to which the tubes and ovaries were liable, and, therefore, through its medium, we had it in our power, not only to avert such diseases, but to arrest them when they were making progress, and even cure them when they had become established.

He had frequently observed cases of salpingitis get completely well under the treatment of endometritis, and also noted the steady decrease and complete disappearance of oöphoritis under the same circumstances.

The frequent, nay almost constant presence of ovarian

hyperæsthesia in endometritis pointed conclusively to the fact that a morbid condition of the ovaries very frequently depended solely upon a diseased condition of the uterus, and the disappearance of the oöphoritis simultaneously with the endometritis put this beyond all doubt.

Dr. Fancourt Barnes brought before the notice of the Society two cases of hermaphroditism occurring in two members of the same family, one nineteen years old, the other scarcely two years of age. After the Fellows had had an opportunity of carefully examining these visually, opinion was so equally divided as to the sex that no definite conclusion could be arrived at.

He also narrated particulars of a case of reduction of a complete inversion of the uterus of four months' duration by means of Aveling's repositior in eight hours.

Dr. Purcell reported his sixth case of kolpo-hysterectomy for epithelioma of the cervix. Recovery ensued in nearly every case; but the lapse of time since the operations was not yet sufficient to preclude all fear of recurrence of the malady.

Dr. W. Alexander, of Liverpool, described a method of treating incontinence of urine in the female in cases hitherto considered to be beyond the resources of surgery, by diverting the urine into the rectum, which, however, was not regarded favourably by those competent to judge.

Mr. Bland Sutton's report upon ovarian dermoids was one of much scientific value, and threw fresh light upon the pathology of these cases. He regards ovarian dermoids, like oöphoritic cysts in general, as originating in Graafian follicles. The monograph is well worthy of perusal by those interested in the subject.

Dr. Richard T. Smith contributed a clinical paper on "Cystic Disease of the Cervix and Endometrium," in which he pointed out that where, late in life, metrorrhagia persists without the expected menopause, it is probably due to this condition. Severe backache he regards also as pathognomonic of this disorder.

Dr. Rutherford communicated some very practical and interesting notes of cases illustrating the treatment of hæmorrhage in uterine fibro-myomata by *hydrastis canadensis*.

In my opening address I alluded to the benefit I had derived from the employment of this drug in many cases of fibroid where hæmorrhage was the prominent symptom, and from extended observation during the past year I can confirm the views then expressed. The influence of fifteen to thirty minim doses, thrice daily, exercised a most marked effect in many cases. Of course it was not to be given empirically in all cases, but in properly selected instances hydrastis formed a very valuable addition to our list of drugs. It has been tried largely in America and very highly spoken of.

As an alternative to electrolysis, where this cannot be carried out, hydrastis forms no mean substitute in arresting hæmorrhage.

Dr. Rutherford also contributed notes of a case of uterine fibroid treated by electricity, where, although the tumour was of large size, extending nearly up to the umbilicus, it entirely disappeared, and with it the menorrhagia, which had brought the patient to the brink of her grave.

The case exemplifies how extremely careful one should be in using such a powerful agent as electricity, for although in this case the patient ultimately recovered, her life was for some time in danger, and had it not been for Dr. Rutherford's skill and care in following up the case to a successful termination the result would have been far different.

Mr. Lawson Tait's "Note on the Influence of Removal of the Uterus and its appendages on the Sexual Appetite" was one of much interest. He had satisfied himself absolutely from careful observation on a series of cases where one or both ovaries had been removed, for very many and various reasons, and at all ages between seventeen and sixty, that their ovaries had as little to do with their sexual appetites as their front teeth had.

The test cases are not those where the operations have been performed on women after marriage or the experience of sexual intercourse. Evidence of the retention of the sexual appetite in most cases would mean nothing at all. But the evidence of women who have been operated on in early youth, in a condition of ascertained virginity, who have

married afterwards, and yet in whom a sexual appetite has been developed, is absolutely unanswerable. Still more remarkable is the evidence obtainable in the cases of young women from whom the uterus and appendages had been removed for large myomatous tumours without detriment to the sexual appetite. Mr. Tait concludes that the seat of the sexual appetite in women exists neither in uterus, tubes nor ovaries.

And now, gentlemen, my task is well nigh accomplished. Fully conscious as I have been of the responsibility attached to the office, the sense of it has been lessened by the assistance I have invariably received from the other officers associated with me in conducting the affairs of the Society. Our Council Meetings have been well attended, and although as your President you may be inclined to courteously accord me more credit than I am fairly entitled to, I feel that our best thanks are due to all those who have contributed so materially in promoting the welfare and interests of the Society. I need scarcely add that to our Secretaries a special vote of thanks is due for the manner in which they have performed their work. Personally I feel much indebted to them, and take this opportunity of recording my appreciation of their persistent efforts to lighten my labours.

It needs no words from me to commend my successor, Dr. Macan, Master of the Rotunda Hospital, Dublin, who must be already well known to most of you by repute, if not personally. To him I relinquish my trust, confident that in his hands the interests of the Society will be well and surely safe-guarded. Thanking you for your kind courtesy and support, I now relinquish my chair as President and for the future shall be content to take my place as an ordinary Fellow of the Society, ever anxious to advance the interests of gynæcology, and never weary of endeavouring to lessen the suffering and misery of the sex to whom we owe so much, from the first moment of our arrival on this troubled sphere to the last scene of all which ends this strange eventful history.

Dr. BARNES, as senior member of the Society, proposed

a vote of thanks to their President for the able and efficient manner in which he had discharged the onerous duties of his office. He alluded to the extraordinary success of the Society, which he attributed to the happy idea of showing specimens without limitation of time. It gave the nearest approach to direct clinical observation. The specimens often illustrated the whole pathological and therapeutical history of a case.

The motion was seconded by Dr. BANTOCK, and was agreed to unanimously.

Dr. HEYWOOD SMITH proposed and Dr. PURCELL seconded a vote of thanks to the retiring secretary and other officers whose efforts had contributed so materially to the progress of the Society and the excellence of the work.

Dr. MANSELL-MOULLIN, in returning thanks for himself and colleagues, said that looking back at the past two years during which he had been connected officially with the Society, the retrospect was one in every way calculated to afford the greatest satisfaction. Whether they regarded the increase in the number of the Fellows of the Society, or its financial position, or the value of the work it had accomplished, a steady progress had attended its course during the whole of that time. He trusted their efforts and exertions as secretaries had in some measure contributed to bring about that result. He was confident that the Society would not only maintain the prominent and important position it had hitherto held, but had a still greater future before it.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JANUARY 23, 1889.

DR. A. V. MACAN, PRESIDENT, IN THE CHAIR.

PRESENT : 24 Fellows, 8 Visitors.

The following were elected Fellows of the Society :—Dr. E. P. Case, Dr. W. C. Weathersby, Dr. Thomas J. Webster, Dr. A. Wallace, Dr. R. E. Walker, Dr. W. H. Merritt, and Dr. O. E. Keller. The following was proposed for election :—Alexander Rudolph Galloway, M.A.

Dr. EDIS showed a broad ligament cyst, which he said was of interest as proving the difficulty of diagnosis in some of these cases. The patient was a single woman, twenty-seven years of age. She had stated that the catamenia had been regular though somewhat scanty, and the last period had ceased about ten days before she was seen for the first time. Four months before, she had noticed a small hard lump in the middle of the abdomen, which remained the same size for two months, and then suddenly increased in size, and moved towards the right side. She was admitted into the Chelsea Hospital for Women and examined very carefully, and was seen in consultation by several members of the staff, and it was generally thought that it was a fibro-cystic tumour of the uterus. *Per vaginam* the cervix was small and pushed back into the hollow of the sacrum. The uterine sound passed about an inch and a-half into the uterine cavity, and as it caused the patient a good deal of distress, no attempt was made to push it further. The result of the examination seemed to imply that the uterus was directly connected with the tumour—so much so, in fact, that several men inclined to the view that it was a fibroid. The tumour extended about two inches above the umbilicus, and was

about the size of a small child's head. It felt very firm through the abdominal walls, but there was an indistinct feeling of fluctuation. There were no symptoms of pregnancy, no mammary development, &c. As it had undergone considerable enlargement during the preceding month, it was decided to open the abdomen and see what it was. When exposed, the tumour looked like a large fibro-cystic tumour of the uterus, so much so that he (Dr. Edis) hesitated to plunge a trocar into it. He managed to drag the tumour out, and then made a puncture, letting out a lot of greenish-yellow grumous material. On proceeding still further with the exploratory incision, he found that the base of the tumour was embodied in the broad ligament, and attached to the right of the uterus five or six inches down. There was nothing to make a pedicle of, and having divided away as much of the adhesions as he could manage, he transfixed the pedicle and removed the tumour in the ordinary way. The patient did well, and was now practically convalescent.

Dr. ROUTH asked Dr. Edis whether he had availed himself of the difference between solid and liquid tumours in the conduction of sound in listening through the abdominal parietes. When there was a doubt as to the nature of a tumour in the belly, by pressing hard upon it and listening one could hear the cardiac sounds if the tumour were solid, but not if it were fluid. The same result could often be more easily obtained by means of the vaginoscope, which would abut directly on the uterus.

Dr. RUTHERFOORD said that he had made a microscopic examination of the walls of the tumour, and he found that the outer wall of the cyst was composed of muscular tissue; then a layer of connective tissue, which bound the muscular tissue to a fibrous layer. A layer of cells on the inside of the tumour was, as far as he could make out, endothelial in character, that is, perfectly flat. Beneath that layer was connective tissue with a very large number of embryonic cells, then fibrous tissue in wavy bundles, then loose connective tissue. Outside all was a layer of peritoneum.

Mr. LAWSON TAIT protested against the use of such a

hybrid word as vaginoscope. He suggested that colpophone would be much more correct. He mentioned that it was very common to find the muscular layer described by Dr. Rutherford. It was sometimes as much as an inch thick.

Dr. R. T. SMITH asked what Dr. Edis had done with the internal membrane—whether he had left it as it was or had enucleated it.

Dr. BANTOCK said he did not clearly understand how Dr. Edis treated the pedicle. He never saw a broad ligament cyst that could be treated in the manner described.

Dr. EDIS, in reply, said he had listened with the stethoscope, and examined the tumour very carefully by pressure. As regarded the pedicle, he explained that there was no distinct pedicle, but he had made a pedicle from what seemed as if it were a layer from the uterine muscular tissue, and had then divided it. He had thought it more prudent to transfix and divide in separate portions.

Dr. BANTOCK showed a fibroid tumour, which, he said, was interesting on account of the reason for which it had to be removed. When the patient first came under his notice in July last, she was very much blanched from hæmorrhage. She was a single lady, aged forty-six, a schoolmistress. He put her on iron and ergot, and although she had recovered from the anæmia, yet she was always obliged to lie up at each menstrual period, and was very anxious that something more should be done. The tumour was a small one, and his idea was simply to remove the appendages, as it did not seem to be a favourable case for the removal of the tumour itself. He operated about a fortnight ago, but found the ovaries so low down in the pelvis and so devoid of pedicle that he was quite unable to apply a ligature. He therefore applied an elastic ligature round the tumour at its base, and then divided the peritoneal covering of the uterus right round. He cut down to the capsule of the tumour, and reflected the lower portion of the uterine tissue, until he had got down to within a quarter of an inch of the elastic ligature, and thus

obtained a very fair pedicle ; he left the ovaries. He added that there would have been great risk of having an insecure ligature had he attempted to remove the ovaries, and the success of the case justified the course he had pursued. The patient was doing remarkably well.

Dr. EDIS said the case indicated the necessity for having one's hands free. In his own case, one of his colleagues had suggested the removal of the ovaries, but they could not be found, even if he had wished to do so. Of course, it was easy to be wise after the event.

Mr. LAWSON TAIT said he had long ago refused to allow his hands to be tied as regarded the steps of the operation. It was so easy in the hurry of an operation to forget such promises. He mentioned that the use of the term "placental souffle" had been objected to in a letter of his to the *Lancet*, and he asked what new discoveries had been made in regard to ectopic pregnancies that had rendered the expression unsuitable.

Dr. EDIS said he had used the term on purpose. He was unable to say why it ought not now to be employed. In extra-uterine gestation it was certainly placental and not uterine.

The PRESIDENT then delivered his inaugural address :—

GENTLEMEN OF THE BRITISH GYNÆCOLOGICAL SOCIETY,—In electing me your President for the ensuing year I feel that you have wished not only to honour me personally, but also thereby to recognise the great school of gynæcology to which I belong. Ever since the foundation of the Rotunda Hospital, now more than one hundred and fifty years ago, Dublin has been celebrated as a school for teaching midwifery. I think I may look on my election as your President as showing that you consider that we have not been mere passive spectators of the modern developments of gynæcology, but that I and those working with me are striving to make Dublin as celebrated as a school of gynæcology as it has heretofore been for its teaching of obstetrics. On behalf, therefore, of both myself and them I thank you most sincerely and heartily for

the great honour you have conferred upon me. I feel sure also that, as your kindness has prompted you to elect me President, it will also lead you to put as favourable an interpretation as possible on whatever shortcomings—and I fear they may be many—you may discover in me. For my part, I can assure you that I am fully conscious of the many and great responsibilities this position entails, but I look forward with confidence that, aided by the efficient executive officers you have chosen to assist me by their counsel and advice, I may be able at the end of my term of office to hand the Society over to the guidance of my successor with its reputation as untarnished and its horizon as unclouded as I have this night received it from my predecessor.

There are few things more difficult for the President of such a Society as this than to settle what subject he will choose as the theme for his opening address. My experience as a teacher in the Rotunda Hospital, where I come in contact with men from all parts of the world, has led me to the conclusion that the bimanual examination of the female pelvic organs, though of course practised by some specialists, is practically unknown to the great mass of our profession. Indeed, I think I may go further and say that not only is it not practised by the profession at large, but that it is difficult at first to get most men to believe in the accuracy of the diagnosis that it renders possible. As a rule I find that even good men are sceptical as to the possibility by this method of palpating the ovaries in all ordinary cases, and it is not till they find that with a little practice they can themselves feel the ovaries in easy cases that their scepticism is removed. But the bimanual examination of a case is not considered exhausted by us until we can not only feel the ovaries, but can also determine their size, shape, consistence, tenderness, and mobility, and also the condition of the ovarian ligaments. Next, the posterior, or utero-sacral ligaments have to be palpated, and finally the Fallopian tubes. Till a man can feel the ordinary healthy Fallopian tubes, in all cases where the conditions are favourable, we do not think he has made much progress in the bimanual method.

Of course, if the conditions are not favourable for this method of examination, we must be content with a less accurate diagnosis. Two things, I think I may say, are essential—that the examination be made with the patient lying on the back, and that the bladder be empty. A special couch or chair is not essential; but our experience in the Rotunda leads us to think that the use of such a chair as I now exhibit to the Society, saves much time and trouble on the part of the practitioner, and is much less fatiguing for the patient. This chair has now been in use in the Rotunda for some years, and is in extensive use on the Continent, where it is known as the Veit-Schroeder Chair.

To-night, however, I would wish more especially to draw your attention to some methods of treatment, which I think I may call direct developments or outgrowths of this bimanual examination; at all events, a thorough acquaintance with the bimanual examination and the results to be obtained therefrom is essential before we can put them into practice. The first of these is the stretching, or breaking down of bands of adhesion, in cases of fixed retroflexion or version of the uterus, and also in cases of prolapsed and fixed ovaries. All other treatment has, as far as my experience goes, been almost useless, and the patients have spent their lives in a state of chronic invalidism. The separation of such bands is effected by introducing two fingers into the rectum beyond the inner sphincter and between the two posterior ligaments, and the thumb of the same hand into the vagina. The other hand is then laid on the abdomen and the fundus of the uterus drawn forwards. This puts all such bands on the stretch, and their recognition is thereby rendered more easy. The amount of force necessary to break them down varies greatly, and can only be learned by experience, but in some cases the separation is made easily, and though the patient suffers a good deal of pain afterwards, I have never seen any bad results follow.

The second development of the bimanual examination is the systematic use of massage in the treatment of chronic pelvic inflammation, whether of perimetritic or parametritic

origin. This method was originally introduced now more than twenty years ago, by Thure Brandt, of Stockholm, but for many years did not arouse any attention in the profession. This was probably due to the fact that its originator was not himself a medical man, which naturally rendered the profession sceptical as to the truth of the results which he claimed to obtain, and for many years nothing was heard of it outside his own country. Some three years ago, however, Dr. Bandl, of Vienna, was induced by Dr. Nissen, of Christiania, to give it a trial, and last year Dr. Profanter published a *brochure* on the subject, in which he gave the history of sixteen cases treated by Thure Brandt, by massage, in Professor Schultze's Clinique in Jena. The evidence these cases afforded was strong enough to convince Professor Schultze, who examined the cases both before and after the treatment, that in massage we have a most powerful remedy for a large number of pelvic affections, such as parametritic and perimetritic fixation of the uterus, displacement and fixation of the ovaries, old inflammatory thickening of the uterine ligaments, &c., &c. Ever since this work appeared we have practised massage very frequently in the Rotunda Hospital, with most gratifying results. Such affections as tenderness of the posterior uterine ligaments seem to be almost incurable in any other way, and indefinite pelvic pains often entirely disappear after the first few sittings.

The most startling claim, however, that Thure Brandt has put forward is, that by a process of massage and uterine elevation, with some movements which, for want of a better word, I would call pelvic gymnastics, he can cure total prolapse in from two to eight weeks. At first sight this seems utterly impossible, and it requires strong evidence to convince us that it is nevertheless true. The last of the sixteen cases that Thure Brandt treated at Schultze's Clinique was one of prolapse, and a full account of it has been published by Dr. Profanter separately, under the title "The Manual Treatment of Prolapsus Uteri." The case was shortly as follows:—

L. S., æt. thirty-four. Farmer's wife, admitted December

29th, 1886; has had three children. During her first pregnancy, in 1875, the womb came down, and this condition gradually got worse up to the period of her second confinement, in 1877. Labours were normal. Patient got up on the eighth day and went about her usual business. Had her third child in 1879, and some months after the womb became entirely prolapsed, and has remained so ever since, except for six weeks in 1884, while she was wearing a pessary. The instrument then came out, and she has had nothing done for her since. The condition when patient was handed over to Thure Brandt for treatment was one of total prolapse, the uterus measuring fourteen centimetres.

The treatment was commenced on December 30th, 1886, and consisted in elevation of the uterus according to Brandt's method, which I will describe more fully later on. After the very first sitting all subjective symptoms of prolapse disappeared. On January 1st the uterus itself was already much smaller, but it was not till January 11th that the fundus assumed its normal position in the pelvis. On January 18th both Douglas folds could be felt in a condition of tension, and on January 31st, a month after the commencement of the treatment, the patient was discharged cured, the cavity of the uterus being reduced from fourteen to nine centimetres.

The patient was examined more than a year after by Dr. Skutsch, assistant to Professor Schultze, who reported that the woman had had no return of the symptoms of prolapse. The uterus was not, however, in a state of normal ante flexion, but was retroflexed; with this exception the woman was permanently cured.

Such a history as this cannot but arrest one's attention, and for more than a year my first assistant, Dr. A. J. Smith, has systematically tried to cure prolapse by Brandt's method, and though he has had a good many failures, he has nevertheless shown me enough to convince me that a large number of cases of total prolapse are capable of permanent cure by Brandt's method. I hope I may be able to persuade him to bring these cases under your notice during the present session.

The treatment itself consists of two parts, the first being the elevation of the uterus. To carry this out the aid of a skilled assistant is necessary, whose duty it is with one hand to elevate the uterus from the vagina, and to keep it in a state of ante flexion, while his other hand is laid on the abdomen exactly over the uterus. The latter hand indicates to the operator the exact position of the fundus. Standing now at the foot of the couch or sofa on which the patient is lying, the operator lays his two hands, strongly supinated, flat on the abdomen, the fingers being pointed towards the pubes, and grasps the fundus between them, its position, as already said, being indicated by the hand of the assistant that is on the abdomen, while the fingers of the other hand of the assistant, which are in the vagina, prevent the fundus being pushed out of reach of the hands of the operator. Having firmly grasped the uterus the operator raises it steadily upwards in the abdomen, in the axis of the pelvis, watching the face of the patient the whole time. This is necessary, as the slightest expression of pain is an indication to desist or to go more slowly. In this way the uterus can be elevated as much over its normal level as it had formerly been prolapsed. When the uterus has been elevated as far as is possible it is allowed to slip gently from between the hands, and sinks slowly in the abdomen. The duty of the assistant is now to receive the uterus as it descends on his finger which has remained in the vagina, and to keep it in a condition of ante flexion. This movement of elevation is repeated two or three times at each sitting, a few minutes' interval being allowed between each, during which time the assistant massages the fundus in order to arouse it to contraction and thereby lessen its bulk.

The second movement now follows and consists of forcible separation and forcible closure of the knees. To carry it out the patient should be placed in the exaggerated stone position, and closing the knees and thighs should elevate the sacrum from the couch, so that the body rests on the elbows and feet only. While in this position the operator forcibly separates

the knees, the patient resisting as much as possible. This is repeated about three times. The contrary movement is now practised, the patient lying with the knees widely separated, and the operator bringing them forcibly together. This is also repeated three times, and closes the sitting. The patient now turns over gently on the face and remains in that position for from five to ten minutes. It is well, when it is possible, for the patient to remain in the recumbent position for the first few days of the treatment, but this is not essential.

The treatment is repeated daily till the cure is effected, the time required varying greatly, but being usually from four to eight weeks.

Thure Brandt recommends this treatment to be supplemented by other exercises, such as are known under the general name of Swedish gymnastics.

That total prolapse of the uterus is capable of permanent cure by this method is beyond doubt, and I have myself seen one of Dr. Smith's cases in which no return of the prolapse had occurred six months after the termination of the treatment. In some cases the method will probably fail, viz., in old people in whom there is a badly ruptured perineum.

A further interesting account of this method, with an explanation of its probable *modus operandi*, was published last year by Professor von Preuschen in the "Centralblatt für Gynäcologie." He considers that the chief factor in the cure is the forcible adduction of the thighs, which he has found causes the levator ani to contract powerfully, and thus form a natural barrier to the descent of the womb, while the chief effect of the elevation of the uterus is, he thinks, to restore it to its normal condition of anteflexion, which makes the descent much more difficult. Whatever, however, may be the explanation given, the fact remains that permanent cure by this method is possible, and consequently the method by which it is attained cannot but be worthy of our earnest consideration.

Mr. TAIT proposed a vote of thanks to the President for his address. He alluded to the selection of their President

as an indication of the high regard of the Society for the celebrated school of which Dr. Macan was so distinguished an ornament.

Mr. BOWREMAN JESSETT seconded the motion, which was carried unanimously.

Mr. F. Bowreman Jessett read a paper.

Two Cases. One of supra-vaginal Hysterectomy, with subsequent faecal fistula, which closed spontaneously ; the patient made a good recovery. The other, removal of sarcomatous ovary and fifteen inches of small intestine. Death on the tenth day. By F. BOWREMAN JESSETT, F.R.C.S.Eng., Surgeon to the Cancer Hospital.

I VENTURE to bring these two cases before the notice of the Fellows this evening, as they present points of special interest, and the complications attending both cases are sufficiently rare for me to invite discussion upon them, and to ask the experience of those who have more frequent opportunities of performing these operations than myself.

Case I.—A young woman, aged thirty, single, was admitted under my care at the Cancer Hospital, on Sept. 26th, 1888, suffering from extreme menorrhagia. She was excessively anæmic from the constant loss of blood, and was totally incapacitated from following her employment—that of a servant.

In September, 1887, she consulted a surgeon, as she had been for some time suffering from dysmenorrhœa, and for six months had been conscious of a tumour, which had grown rather rapidly ; there was also some metrorrhagia, but not alarming. It was thought advisable to perform abdominal section, with a view, if possible, of removing the tumour, and if this was found impracticable, to remove the ovaries and appendages.

At the operation a large, firm, elastic tumour was found, subperitoneal, attached to the uterus by a broad base ; there was no chance of getting it completely away, so the operator clamped the base with Lawson Tait's clamp, and removed most

of the growth, which had all the appearance of a fibroid. A small tumour, the size of a walnut, just projecting on the surface of the uterine wall, was left. The ovaries and appendages were removed, but it is noted that a small portion of the left ovary was accidentally left behind, most of it, however, being removed. The abdomen was closed, and the patient made a good recovery, and was discharged in nine weeks, apparently well.

The patient was re-admitted in September of last year, under my care. She was excessively weak and anæmic from loss of blood. She says since the last operation the loss at the periods had been greater than before, and she suffered considerable pain.

On examining the abdomen a tumour of irregular shape was felt, being about the size of a football, on the right side of which a large boss, the size of a cricket ball, could be distinguished. The whole growth was freely movable. The uterine sound passed about four inches. The cicatrix of the previous operation was firm, and about three inches long. The patient was taken into the hospital, kept perfectly at rest, and her general health attended to. It was decided to perform supra-vaginal hysterectomy as early as possible.

On October 5th, the patient being under ether, an incision some five inches long was made in the middle line of the abdomen between the pubes and umbilicus; the growth immediately came into view, but owing to its being so deeply situated in the pelvis, it was drawn out of the abdominal incision with considerable difficulty. Kœberle's clamp was applied and the tumour removed. The remaining steps of the operation were carried out in the usual manner, and the patient returned to her bed.

All went well, and although her temperature kept rather high, she had no bad symptoms, sleeping and taking her nourishment well.

On October 22nd, seventeen days after the operation, the clamp and slough came away, leaving a deep healthy-looking cavity, which was kept irrigated. Her bowels had

been opened nearly every day, and everything progressed favourably until October 25th, three days after the removal of clamp, when a large quantity of fæces welled up through the small opening in the abdominal wound, clearly indicating the presence of a fæcal fistula. On examination of the rectum it was found to be full of solid fæces, very hard. An enema of glycerine 3 iv. was given at once, and the fæces broken up. Bowels freely relieved.

October 26, there was still a large quantity of fæces passing through the wound, and the hard mass, although smaller, was present in the rectum. An enema of half a pint of olive oil, followed by warm water, was given, and repeated on the next day, and the rectum ordered to be washed out every night and morning with warm water and sweet oil. The mass of fæces did not entirely disappear for a week. On the enemata being given some passed through the wound, seeming to point to the fistula being situated either in the upper part of the rectum or sigmoid flexus. The motions gradually assumed their natural passage, the fistula slowly closed, and the patient was discharged quite well on December 20th, 1888, eleven weeks after the operation.

Case II.—A married woman, aged forty-four, was admitted into the Cancer Hospital on July 31st, 1888, with a tumour in the abdomen, which was diagnosed as an ovarian tumour, probably malignant.

She has had two children. Has never had any serious illness, but eight months ago had an attack of jaundice, said to be due to a fright.

Menstruation normal and regular. Complains of distension of abdomen and tenderness over region of liver, and pain at the base of sacrum, and about the hips when walking. Suffers from lassitude and great weakness; has noticed a swelling in the abdomen for the last two months, and has lately lost flesh rapidly, and sleeps badly. Appetite bad, tongue red and glazed. Says she has suffered from a yellow thick offensive discharge, *per vaginam*, during the last month.

Present state.—Measurement round the abdomen at a

level of the umbilicus is thirty-three inches'. The woman has an anxious expression on her countenance, her features are drawn, and cheeks sunken. She is much emaciated. On examining the abdomen a tumour is found about the size of a foot-ball, dull on percussion, resistant and irregular in shape. Percussion over either flank resonant. By vaginal examination the uterus is found to be normal and movable, and evidently not connected with the tumour. The tumour is freely movable in the abdomen.

Urine: sp. gr. very high, 1034, acid, with considerable deposit. No albumen or sugar. A few days before the operation ascites developed very rapidly. The veins over abdomen were somewhat enlarged, especially on the left side.

Under these circumstances it was decided to operate as early as possible with a view to removing the growth, and on August 11th, the patient being placed under the influence of ether, the abdomen was opened by an incision in the middle line below the umbilicus, and immediately about a gallon of ascitic fluid escaped. An irregular shaped tumour next presented itself, lobulated and having an elasticity to the touch that resembled fluctuation. The omentum was found to be firmly adherent to the growth throughout its whole width, but the tumour itself was freely movable, and little trouble was anticipated in its removal.

The omentum was ligatured in segments and cut away with scissors, and the tumour was easily drawn out of the wound. It was then found that a portion of the small intestine was firmly adherent to the posterior surface, and was so intimately incorporated with the growth that it was found impossible to detach it without either tearing the bowel or detaching some of the growth. Under these circumstances, guided by my experience of numerous experiments I had lately made in intestinal surgery, I determined to cut away all the intestines implicated and join the two ends in the manner to be described.

I passed an india-rubber band round the intestine above and below the portion to be removed, and the whole being

drawn well out of the abdomen, I cut through the gut, then ligatured the pedicle of the tumour, and dropped it back into the abdominal cavity. The patient was now very exhausted, and it behoved me to be as quick as possible in joining the two ends of divided intestine. This was done by Senn's method of lining the upper end with a thin band of india-rubber, and invaginating this into the lower portion. As this and other operations on the intestine, which I have been investigating, form the subject of a paper shortly to be brought before another Society, I refrain from going into details of the operation; suffice it to say the two ends were securely united in a few minutes. The abdominal wound closed in the usual manner after the cavity of the abdomen had been well washed out, and a Tait glass drainage tube passed deeply into Douglas' pouch. The operation lasted two hours altogether. Before returning the patient to bed it was deemed advisable to administer an enema of brandy, and an hypodermic injection of ether.

The patient rallied well from the operations, and the wound was treated in the usual manner, the drainage tube being emptied every six hours. She was fed with zymonised beef suppositories once every four hours, nothing being given by the mouth. The temperature kept very steady at from 99.8 to 100.5. On the 13th she complained of flatulence, and was allowed to take a teaspoonful of Brand's essence of beef in a tablespoonful of water. She had no pain or tenderness in abdomen, which was perfectly flat. She was now fed every six hours with a teaspoonful of Brand's essence.

August 14th.—A teaspoonful of milk in an ounce of soda water was ordered every four hours, alternately with the Brand's essence of beef. A little flatulence. No pain or tenderness in abdomen. In the evening the bowels were well opened. No blood. Patient much relieved, as a quantity of flatus passed with the motion.

August 15th.—Bowels opened four times during the day and night; doing well and expresses herself as feeling very comfortable. The drainage tube was removed.

August 16th.—Complains of slight nausea and a little tenderness. An india rubber drainage tube was inserted, and 3vi. of tinted coloured fluid withdrawn. Abdomen slightly tympanitic. An enema of gruel was given.

August 17th.—Bowels opened three times. The temperature had jumped to 104° in the evening. Tube emptied, about 3vii. of coloured fluid withdrawn with shreds of lymph. Abdomen ordered to be packed with ice, and patient to be fed entirely by means of nutrient enemata. The patient however now became rapidly worse and died on August 20th, at 10.30 p.m., being nearly ten days after the operation.

Post-Mortem.—On opening the abdomen it was seen that general purulent peritonitis existed. There was a quantity of fluid in the cavity mixed with lymph. The bowels were matted together, and on searching for the seat of junction of the divided gut fæces were discovered to have escaped through an opening caused by one of the ligatures on the mesenteric side of the bowel. The india rubber ring was found to be *in situ*, the catgut sutures not having become absorbed. Then the rubber ring had acted more or less as a valve and prevented the fæces from passing; this caused distension of the gut above the seat of operation, ulceration along one of the ligatures, perforation, peritonitis, death. The peritoneal surface of the upper end of the gut was firmly united by plastic adhesion to that of the lower, where the invagination had taken place, and I am strongly persuaded had I used ordinary catgut instead of chromatised for suturing the band of rubber to the end of the gut, this would have become detached and been voided, and probably the patient would have made a good recovery. Under the microscope the growth was found to be a round-celled sarcoma.

Remarks.—Both these cases present several points of interest, I think. In the first case the question as to whether the growth of uterine myomata is checked by the removal of the ovaries and appendages, or whether the bleeding is in any way controlled by their removal, attracts attention. Then the unexpected occurrence of a fæcal fistula, three days after

the removal of the clamp and strangulated portion of the uterus and its subsequent spontaneous closure, being of very rare occurrence, is worthy of a few moments' consideration.

It would appear that the removal of the appendages and ovaries did not check the growth of the tumour or diminish the bleeding—in fact although the patient made a very good recovery from the first operation, yet she was not in the least degree benefited by it. The tumour steadily increased. The bleeding continued as badly if not worse than before, and the patient's condition gradually became desperate.

I find that in a large number of cases that have been recorded of removal of the ovaries and appendages for excessive bleeding caused by the presence of uterine myomata, the proportion of complete cures has been *one in thirteen*, while one in ten have been relieved. Now if these figures are correct or even represent approximately the actual results of the operation, it appears to me that they are not very brilliant, and if nothing better can be held out to us than this, I would ask, is it worth while to subject a patient to such an operation, when it is twelve to one that she will in all probability have to undergo another and more severe operation later on?

Now a point I should like to ask the Fellows of this Society is this, in the large experience that many of you have had in this operation, are there any special forms of myomata of the uterus that are more amenable to this form of treatment than others? *i.e.*, (1) Would a single large myoma in your experience be more likely to shrink and disappear than if there are a number of bosses projecting from the uterus? (2) Are extramural, intramural or polypus likely to be favourably affected more in the one set of cases than the other? (3) Has age anything to do with it? Are young people more likely to receive benefit than the middle-aged, or the reverse?

In the case before us the patient was young, and as you see by the specimen, the uterus was full of myomata in different stages of development.

I am quite prepared to be met with the objection in my case that a portion of one ovary was presumably left behind, and that benefit, therefore, could not be expected to the same extent as if they had been removed in their entirety.

And from this we must pass on to consider the question how far electrolysis and drugs and general treatment will affect the growth of these myomata. Electrolysis I will at once put on one side, as I have had no experience in its applications. That great results are claimed for it we all know, and I should fancy if any good were to be expected, it would be by its use quite early in the disease—in fact when bleeding was the predominant and chief symptom.

With regard to drugs, my experience has led me to the belief that the growth of these tumours is not in any way affected by their use; but that the bleeding may be considerably moderated by their steady administration. Without going into details respecting the respective merits of the different drugs in use, I may say at once that in my hands *Hydrastis Canadensis* yields by far the best results.

To pass on, gentlemen, now to the second point of interest, viz., the formation of a fæcal fistula in the site of the wound, I may say I have hunted up certain authorities, and find they make no mention of such a contingency occurring, neither can I find such a case recorded in any of the medical papers; and yet I cannot help thinking that such cases have occurred. After operations for ovariectomy formerly, I believe it was not at all uncommon. Thus Mr. Doran in his work on gynecological operation mentions a case of Dr. Lyons, and attributes the cause to pin-hole perforations in the intestines, believed to have been made by the needle used in applying sutures to the abdominal incision. Other cases also are on record. But I can find no mention anywhere of fæcal fistula following supra-vaginal hysterectomy.

What, then, was the cause of the accident? Could the cicatrization of the parts after the previous operation have dragged the sigmoid flexure, or upper part of the rectum, so closely into contact with the uterus, that a small portion

might have been caught up by the wire? I think not ; otherwise we should have had other symptoms.

That there was considerable dragging there can be no doubt, and as was discovered after the formation of the fistula, the rectum was filled by a hard mass of fæces, which was not suspected, as the bowels had been relieved daily, and the rectum washed out with large enemata several days before the operation. I think it quite possible that the dragging and the presence of this mass of fæces might have caused slight ulceration of the walls of the rectum.

The treatment of such a fistula caused me considerable anxiety. That no operative interference could be entertained was self-evident, as from the depth of the opening, from the condition of the parts after such an operation as hysterectomy, and the uncertainty as to the situation of the opening into the intestine, no hope of its closure by operation could be expected. I therefore adopted what appeared to me to be the best course, and one which held out the most reasonable hopes of getting the fistula opening to close, viz, keeping the rectum well washed out twice a day, and keeping the abdominal wound and fistula thoroughly irrigated and cleansed. The results proved the correctness of my view, and the patient has now quite recovered.

In the second case the chief points of interest were the lesson it taught of the impossibility of being able to diagnose the adhesion of omentum and intestines to an abdominal tumour before the abdomen is opened, and subsequently what course the surgeon had better adopt should he find such a state of things to exist ; and further, the presence of ascitic fluid as a diagnostic sign of malignant disease.

In my case the tumour was freely moveable in every direction—peculiarly so ; and I fully anticipated that there would have been not the slightest difficulty in removing the growth.

The fact of the adhesion of the omentum did not cause me the least anxiety, and it was easily ligatured in segments and divided, after which the tumour was most readily removed

from the cavity of the abdomen. When I found the large coil of intestine firmly adherent to the posterior right aspect of the growth, I endeavoured to peel it off, but found it impossible to do so without either tearing the bowel or removing some of the growth with it. I then had to decide, and that speedily, whether I should return the growth into the abdomen, which of course meant rapid increase of the tumour and early death, or to cut away the intestines, and either suture the ends, or form an artificial anus. I determined to cut away the intestine, and preferred uniting the divided ends by Senn's method, as this could be done more speedily than by Lembert's operation, and with better chance of success. I regret now that I did not form an artificial anus, which could have been closed by a subsequent operation. With regard to the importance of the presence of ascites as a diagnostic sign of malignant disease when co-existing with ovarian tumour, I think Mr. Lawson Tait and others have already drawn attention to this point, the observance of which may often aid the surgeon in arriving at a correct diagnosis.

Dr. BANTOCK said he had never heard before of fæcal fistula in association with supra-vaginal hysterectomy. It was difficult to understand how it could happen, unless it was through the great distension of the rectum by the accumulation of fæces. It was no uncommon thing in removal of the appendages to meet with fæcal fistula. He had, however, only seen one such case. The fæces escaped several days after he had removed the drainage tube, and when he thought the patient was all right. By keeping her on a milk diet, and washing out the rectum, the patient got well in a very short time. It also once occurred to him in removing a real intra-ligamentous cyst he had not made an incision into the tumour, as he generally did, but he endeavoured to separate it, and thought that the first adhesions he came across were omental, but he had made a mistake. The rectum was so closely united that it was not surprising that it had occurred. Mr. Jessett had called attention to the results obtained by the removal of the appendages for the treatment of myomata.

He himself was very much guided by the size of the tumour. In the case he had just shown, if he could have removed the appendages he would have done so, because the tumour—a hard fibroid—was entirely intramural, and it might be hoped in such a case that the interference with the circulation, resulting from the removal of the appendages, would cause the tumour to disappear. That explained the improvement in the patient's condition under the ergot and iron. There were other cases which he would not dream of treating in that way, such, for instance, as when tumours projected into the uterine cavity. On looking at the specimen shown by Mr. Jessett, he saw that the cavity had a large number of hard fibroids projecting into it. Most of those cases would fail if treated by simple removal of the appendages. It had occurred that after removal of the appendages fibroids had been expelled by the vagina. Those were cases in which hæmorrhage occurred after the climacteric had passed. He had seen cases of both kinds. If he came across a case in which he felt certain there were myomata projecting into the uterus, he would not be satisfied with removal of the appendages, for there would be also a degenerative condition of the mucous membrane of the uterus, which leads to meno and metrorrhagia. If he could remove this by dilating the uterus and curetting, followed by the application of a saturated solution of iodine, he would do so. A few years ago he met with a very extraordinary incident of the kind. A woman getting on for fifty came to him very anæmic from loss of blood. She had a large fibroid tumour projecting from the os, and in the abdomen there were numbers of other fibroids. The tumour was removed by amputation of the pedicle, and a large polypus of the mucous variety was also removed from the cavity. The uterus was thoroughly curetted and treated with strong solution of iodine, and that patient got perfectly well in spite of the other fibroids in her uterus. He would not be influenced by the number of fibroids if they were in the substance of the uterine wall. About two years ago he had removed a pedunculated fibroid from the fundus and both

the ovaries, but left a number of small fibroids in the substance of the uterus. Within twenty months all those tumours had absolutely disappeared, and the body of the uterus had fallen away to the size of the end of the thumb. Even the very first case in which he had performed that operation he was only able to remove one ovary and tube, and yet the tumour absolutely disappeared in a few years. Referring to the resection of the intestine he said that the danger was at the junction of the intestine with the mesentery. He preferred to pull off the intestine and then sew up the wound in the intestine, preferring not to injure the junction with the mesentery.

Mr. TAIT said that five or six years ago he would probably have agreed with much that Dr. Bantock had said, but he had since modified his opinions. He said that the question of the treatment of myomata had been handicapped by the nonsensical talk about electrolysis. He said that it was now eighteen years ago that he had pointed out that there were two separate and distinct diseases comprised in the terms myoma or fibroid. In a paper he had written for the *Birmingham Medical Review* he had resumed the whole discussion, and upon much less abundant data than he now possessed. Everything showed very clearly that there were two distinct diseases, distinct in their etiology, pathology and surgical treatment. There was the multi-nodular myoma and there was the rapidly-growing, soft, oedematous myoma. Until a separate study was made of those two diseases, the confusion would continue to exist. The oedematous myoma occurred at any age, and he was just going to operate on a young woman of twenty-four, with one of them; and he had shown one the other day growing after the menopause. He had never seen a multi-nodular myoma calling for removal under thirty or after fifty. He feared the removal of the appendages would not arrest or remove the growth of the soft myoma, and as a matter of fact he had found that it did not. Therefore in cases of soft myomata he removed the tumour and not the appendages. In the other class of cases

he removed the appendages with the greatest confidence. With reference to the question of fæcal fistula he had very much to say, but the atmosphere was not clear enough for its discussion. They were by no means uncommon in the old days of hysterectomy, because they did not remove the tumour from the strain on the broad ligament, and they often included the rectum in the clamp. There was nothing uncomfortable about it, as it always healed easily.

Dr. BANTOCK rose to explain that in reality there was no divergence of opinion between himself and Mr. Tait, but owing to the pressure of time he had been unable to develop his idea. When he spoke of the size of the tumour, he had in his mind the difference between the soft and the hard tumour. He had never seen a soft tumour which was not large. He had said that he would only remove the appendages in quite small tumours. If it weighed three or four pounds then he would remove the tumour. He had removed the appendages in one such case where he had subsequently to perform hysterectomy.

Mr. TAIT added that the soft myoma rose out of the pelvis like a pregnant uterus, and gave rise to no clinical symptoms except hæmorrhage.

Dr. RUTHERFOORD asked Mr. Jessett why he had resected the intestine in his case, and why he had not simply peeled them off the tumour.

Dr. HEYWOOD SMITH said he could quite corroborate what had been said about the effect of tumours which projected into the uterus. Dr. Bantock might remember he had exhibited one case some time since, and he (Dr. Smith) another in which there were small polypi right up at the fundus, giving rise to hæmorrhage. Even if they operated near the menopause in those cases of hæmorrhage and increased size of the uterus, they were not sure to obtain the best possible results. He asked what it was that induced absorption of the intramural fibroids after the removal of the appendages. The great point was to be able to diagnose the condition of the interior of the uterus, and that was often extremely difficult.

Mr. JESSETT, in reply, said he agreed with Dr. Heywood Smith in his remarks as to the difficulty of making out the condition of the uterus before they got it outside. He mentioned that the age of his patient with multi-nodular myoma was only thirty. He said that if Dr. Rutherfordord had seen the case at the time of operation, he would have agreed that any other course than the one he had adopted would not have been possible. He regretted that he was not then provided with one of the decalcified plates, which he thought would have materially increased the patient's chance of recovery. He did not look upon resection of the intestine as a very serious operation under ordinary circumstances. His experience of invagination without the plates had not been very favourable. Out of ten cases in which he had performed it on dogs three had died from the same cause as in the case he had narrated, viz., owing to the two sets of sutures not giving way at the same time, the tube acted as an obstruction. In eight cases of resection and suture all had recovered. His patient had done splendidly until the eighth day, and had had several perfect actions of the bowels.

The Society then adjourned.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, FEBRUARY 13, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT: 19 Fellows, 4 Visitors.

The following was elected a Fellow of the Society:—Dr.

A. R. Galloway.

The following were proposed for election:—William Watkin Leigh, M.R.C.S., Treharvis, South Wales; Alfred S. Gubb, L.R.C.P., London; Gregory Arthur Féré, M.B., Toronto, Canada.

Mr. LAWSON TAIT showed some gall stones which he had removed from a patient the other day, the special interest of which lay in the fact that the stones were not in the gall bladder but occupied a cavity in the substance of the liver. He mentioned the case in view of the general opinion that gall stones were always formed in the liver. He said there was no doubt that they were formed in the course of the circulation through the liver, and the fact that they were afterwards found in the gall bladder was due simply to mechanical reasons. Referring to the operation of cholecystectomy or cutting out of the gall bladder, which had been recommended on the ground that there was a liability to re-formation of stones in the gall bladder, he pointed out that so severe a proceeding was altogether uncalled for, since it could not influence in the least such subsequent re-formation. Cholecystotomy would fulfil every indication.

The next specimens were removed from a woman who had developed gonorrhœal symptoms immediately after marriage. The patient had been married seven or eight years ago at the age of twenty, being at that time in perfect health. Within two or three weeks, however, the excitement

lit up some old gonorrhœal mischief in the husband and it extended up the tubes, giving rise to an attack of peritonitis lasting two or three months, and she had never had good health since. He removed the appendages three weeks ago, and the patient had made a perfect recovery.

The next case was an illustration of much the same sort of thing, with this addition, that three years ago he had removed the left set of appendages and had relieved her sufferings for some considerable time. Menstruation returned regularly. Two years ago she came back again complaining of the old symptoms, and went on from bad to worse until he felt constrained to remove the appendages on the right side also, which he found to be in the same condition as on the other side. He called attention to a curious mistake on the part of his secretary, it having been put down in the record that both sets of appendages had been removed on the first occasion. When he came to look over his correspondence on the subject he found that this was not the case. In consequence of this mistake the case had been looked upon as one of failure of the complete operation, which was not true. He was very much surprised to find the second set of appendages on opening the abdomen.

Dr. BARNES asked whether there was any evidence of gall stones increasing in size in the gall bladder. In reference to the second specimen he asked Mr. Tait whether he would object to the tube being opened up.

Dr. ROUTH asked whether there was any chance of the husband having contracted a fresh attack of gonorrhœa between the first attack and the second, or whether it was infection from gleet.

Dr. RUTHERFOORD asked how long before marriage the husband had had the attack of gonorrhœa.

Dr. BANTOCK said he was not satisfied that salpingitis was due to gonorrhœa as frequently as had been made out. He had seen a number of cases in which such a cause was quite out of the question.

Dr. ROUTH said that acute vaginitis was very often called

gonorrhœa when it was really nothing of the kind. It would be necessary to define what was gonorrhœa in the female and what was not. He said he had seen purulent discharges from the uterus in virgins still intact yet presenting all the characters of true gonorrhœa. He considered that vaginitis could not be called gonorrhœal unless it involved the urethra.

Dr. BANTOCK mentioned that the last case on which he had operated, in which he had removed a ruptured tubal pregnancy on one side and a pyo-salpinx on the other, was in a lady of forty with eight or nine children, and he could not conceive the possibility of gonorrhœal infection, although it was the most characteristic case he had ever seen.

Mr. TAIT, in reply, said that increase of size in gall stones might take place in the gall bladder or in any other cavity, just as vesical calculi underwent enlargement in the bladder, though they in a vast majority of instances were originally formed in the kidney. With reference to the third case he did not claim that there was any history of gonorrhœa, but only that it was a case much resembling the second. In reply to Dr. Rutherford, he said that the husband had contracted his attack of gonorrhœa at seventeen years of age and was married at twenty-seven. The husband was very frank in the matter, and assured him that he never since exposed himself to the chance of infection. He admitted that it was still a moot point as to the relative proportion of gonorrhœal salpingitis. His own experience led him to the opposite conclusion to that arrived at by Dr. Bantock, and he had always followed up his cases very carefully. He pointed out, in reply to Dr. Routh, that they were only speaking of gonorrhœa as a disease communicated by the man to the woman, and where they had a man with a history of a past attack, whose wife, directly after marriage, developed unequivocal symptoms of gonorrhœal vaginitis, there was no room for reasonable doubt.

Dr. BANTOCK brought before the Society a case of fibroid of the uterus which had been confided to him by Dr. Vincent Jackson, of Wolverhampton. E. L., thirty-four years of age,

was admitted into the Wolverhampton and Staffordshire General Hospital in January, 1889, on account of a tumour in the lower part of the [abdomen, which had existed for five years previously but had latterly much increased in size. Its bulk caused considerable inconvenience and pain. She had been married thirteen and a-half years, but had never been pregnant. The diagnosis was made of a subperitoneal, more or less pedunculated, fibroid tumour. The abdomen was opened on the 29th January by an incision two inches long, and the tumour was examined and found to be a solid growth connected with the uterus and so completely filling the true pelvis that the finger was barred from passing beyond the brim. The incision was lengthened to the umbilicus and strenuous but unavailing efforts made to dislodge the mass. Ultimately, by the aid of two pairs of strong vassella forceps and the help of an assistant, the mass was slowly raised from its deep and tightly-fitting bed, bringing with it the uterus, to the left fundus of which it was broadly connected. The short fleshy pedicle was transfixd with a needle carrying a double ligature, and each half was slowly tightened, the whole being encircled by another ligature. The stump was pared on each side obliquely towards the centre. The edges were then approximated, and the peritoneal covering on each side was stitched together with catgut sutures. A glass drainage tube was inserted and the operation completed. The time occupied in its removal was fifty minutes. The weight of the tumour was two pounds four ounces. The result of the operation was not given. The hæmorrhage was the only thing to be feared, and that might be avoided by proper attention to the application of the ligature, and by not leaving a great piece of stump to slough away inside the peritoneum.

Dr. HEYWOOD SMITH agreed that it was a great desideratum to settle the question of the intra-peritoneal treatment of the pedicle. He took exception, however, to the distinction drawn by Dr. Fenton between the hard and the fleshy pedicle. He thought the latter were the most dangerous, as being more apt to shrink and so give rise to

hæmorrhage. It remained to be seen whether careful tying of the ligature and the use of a drainage tube would meet the case. There was a certain amount of risk in drawing the pedicle outside, and the healing process was retarded, though that could not be put in a line with the patient's safety.

Dr. FENTON added that in tying a pedicle a stout cord was required, whereas most operators used too slender a thread to allow of the requisite amount of force being employed.

Dr. BANTOCK said there could be no doubt that the question of the treatment of the pedicle was all-important in fibroids of the uterus. He agreed that certain cases of pedunculated fibroid might be treated by ligature of the pedicle, but if Dr. Fenton thought that the matter could be settled in the easy way suggested by him, he was very much mistaken. Some pedicles would be insecure and dangerous, no matter however carefully they were tied. An allegation of carelessness was not a sufficient explanation. He had tried both plans, and it was his want of success with the ligature that had led him to have recourse almost invariably to the extra-peritoneal treatment. He had used the most powerful forceps. He had compressed the pedicle to an eighth of its original volume. He had applied the double ligature, transfixing it in addition to a circular ligature, and even stitched the peritoneal edges together; yet before the operation had been completed oozing had often begun. He insisted on the fact that patients did not usually die from the hæmorrhage as such, but from septicæmia, due to the decomposition of the ooze. That was why the use of a drainage tube was advised. It must be that they feared the oozing from the stump of the pedicle, for there was nowhere else it could come from. He would be very glad if a method could be devised to overcome the difficulties and drawbacks, as the recovery took much less time. Hitherto, however, he had heard of no such method which would give them such assurance against hæmorrhage as they could obtain from the extra-abdominal method.

Mr. TAIT said he heartily endorsed the remarks made by Dr. Bantock, but he thought it was necessary to refute some-

what more categorically the allegation that patients died in consequence of carelessness in tying the ligature. He said that if Dr. Fenton visited his armamentarium and saw the numberless contrivances and devices for the purpose of tying the cord more tightly than it could be tied by the human hand, he would relieve them from such a charge. He said that even the most tempting-looking pedicles could not be relied on, because uterine tissue was so laden with serum that even if tied ever so tightly it would begin to bleed in twenty-four hours. He had tied some five or six thousand pedicles, and while he had never had hæmorrhage from ovarian pedicles, except in one or two cases, it was quite another thing with the pedicles of fibroids. He regretted nothing so much as having been induced to try the intra-peritoneal treatment of the pedicle. Even hydraulic pressure would not render them secure, and he had employed pressure up to two or three tons. At present, all that his nurses had to do was to give a turn to the nut whenever oozing set in. They were not secure until the lapse of eighty or ninety hours. It was true that certain cases might be safely treated by ligature, but as it was impossible to distinguish them prior to operation, that knowledge was not of much service.

Dr. BANTOCK then exhibited some specimens which he said might be thought to raise the question afresh as to the ligature. The case was a very good example of the pedunculated tumour, which he would never be tempted to trust to ligature. The operation in that case had to be done on account of repeated attacks of retention of urine, which so interfered with the comfort of the patient, a cook, that she begged that something might be done to alleviate her condition. She had four attacks between August and December, necessitating the employment of a catheter. He showed the tumour, which was down in the pelvis, and inside the uterus were fixed the fibroids, which he also showed. It was difficult to imagine that the two fibroids came out of the uterus which he had before him, but it was so. He simply divided the uterus and shelled them out, so as to get at the

pedicle better. The operation was done on December 31st, and the patient was now quite convalescent. To illustrate the peculiarity of uterine tissue, he mentioned that it was his habit in applying the *serre nœud* to tighten the wire all he could; indeed, all that the wire would bear without cutting through the tissues. Then, in the course of trimming the stump he tightened once more, and again when he had got the tumour completely away. When he closed the stitches he tightened again, and so on several times. Yet they were not secure against oozing. That showed how the tissues shrank, and how utterly impossible it was to control these extraordinary tissues.

Dr. BANTOCK then showed a couple of specimens of true ovarian cystomas. One was about the size of a duck's egg and contained a dark treacly fluid. He said it was easy to see that hæmorrhage had already taken place into the sac. He thought it was the only example of double ovarian disease running concurrently existing. The patient was a married woman, the mother of one child, born four years ago. There had been no pregnancy since. Her age was 27. The patient had come under the notice of his colleague, Dr. Rutherford, who had sent her in to be operated upon. They did not succeed in making a very accurate diagnosis beforehand. It was a question as to its being pyo-salpinx or some other condition of the ovaries or tubes calling for surgical intervention.

Dr. BANTOCK then showed an interesting specimen, though hardly gynæcological. It was a case of hydatids with a large mother cyst and numerous daughter cysts. These were obtained from a single woman, aged twenty-four, who was supposed to be suffering from ovarian tumour. There was a tumour in the right side, and a vaginal examination revealed the fact that the pelvic viscera were all matted together. That was thought to be due to some antecedent mischief in the tubes or their neighbourhood. The condition was diagnosed to call for an exploratory incision, and this was made. He came down upon the tumour, which was

covered with peritoneum, and he shelled it out, but before it was removed its character was made evident by the rupture of the parent cyst. After it had been removed, he examined the pelvis, and found the surface of the uterus and the top of the broad ligaments as though they had been sown with innumerable small granular bodies. Above that, towards the liver, there were a number of small hydatids of various sizes. A drainage tube was inserted into the pelvis, and the patient did very well, the temperature returning to normal within a week. In carrying her downstairs, however, something must have been disturbed, for her temperature went up and an abscess formed, from the effects of which she had not yet absolutely recovered.

Dr. EDIS said the case was one which suggested the question as to what good electrolysis would have been. Did anyone think it would have relieved the symptoms? Would it have led to absorption? Such cases as the one before them showed very clearly the futility of attempting to treat them by any such means.

Dr. BARNES asked what the relations were in the case of hydatids in respect of the uterus. He pointed out that the ordinary so-called hydatid of the placenta was due to degeneration of the villi of the chorion, and was, therefore, quite distinct from true hydatid. They could quite understand now that some of those true hydatids might penetrate the uterus and develop there, and so give rise to grave medico-legal questions—the ordinary placental hydatid being held to be a product of conception.

Mr. TAIT mentioned that the matter had been raised by a question at the College of Surgeons, where the most old-fashioned notions prevailed as to the pathology. On the *post mortem* table those cases were found with the apparent origin which Dr. Barnes attributed to them. They were found localised in tissues and organs in a way which utterly prevented the belief in the old-fashioned origin. He had found them in the Fallopian tube. It was quite clear that they must revolutionise their views of the pathology.

DR. EDIS CASE OF EXTRA-UTERINE GESTATION.

FIG. 1.

RIGHT APPENDAGES. POSTERIOR SURFACE.

- (a) Ruptured Tube ; site of the Extra-uterine Gestation.**
 - (b) Closed End of Fallopian Tube.**
 - (c) Section of Uterine End of Fallopian Tube.**
 - (d) Small Ovarian Cyst.**
-

FIG. 2.

MICROSCOPICAL SECTION OF FALLOPIAN TUBE.

- (a) Mucous Membrane thickened and infiltrated with Inflammatory Corpuscles.**
- (b) Remains of Columnar Epithelium which is absent in most places.
Where present it has lost its columnar shape and is cloudy.**
- (c) Muscular Coat, not thickened. Inflammatory Corpuscles invading the Muscular Fibres.**

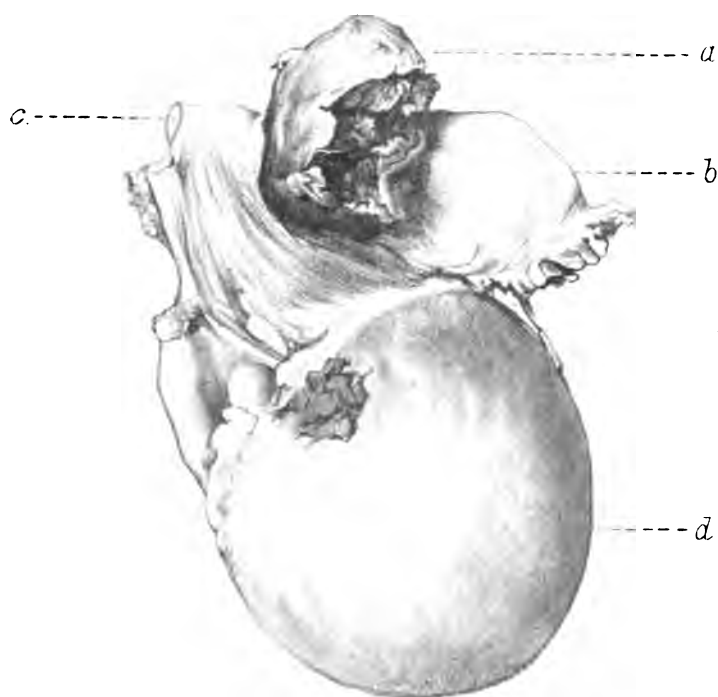


Fig 1



Fig 2

Danielsson & Co, lith

Dr. BEDFORD FENWICK pointed out that the second case brought into evidence an interesting clinical fact. He asked Dr. Bantock whether there was any marked phthisical history in the family of the patient. He remarked that there seemed to be a marked tendency in phthisical people to cystic degeneration of the ovaries. He had recently had a remarkable series of such cases at the Victoria Park Hospital of women who had died of phthisis, and a large proportion of them had these cystoma, with hæmorrhage into the cyst. This seemed to be a remarkable analogy between the hæmorrhage in such cases and the hæmorrhage from the lungs. He thought it was a very important fact to elucidate both from an etiological and a therapeutical point of view.

Dr. BANTOCK, in reply to Dr. Barnes, said that the hydatids were in the parietes, attached to the right of the umbilicus. If he had known it was situated there he might have cut down upon it at once. In reply to Dr. Fenwick, he said he had no information on the subject whatever. There was no trace of phthisis in that particular patient, but he would inquire as to her family history and inform Dr. Fenwick of the result.

Dr. EDIS related a case of extra-uterine gestation, also exhibiting the specimen.

Mrs. W., aged thirty-two, married five and-a-half years; sterile. Last normal menstruation December 2nd, 1888. Generally very regular every twenty-eight days, but she missed the period due at the end of December and saw nothing for forty-five days, *i.e.*, January 15th, 1889. During this time she felt perfectly well. On January 14th she experienced a sudden attack of excruciating pain in the right iliac fossa; she was almost collapsed, but after lying down on the bed for two hours, although she felt weak, she was able to get up, but could not fasten her dress without discomfort.

On the following day, 15th, a sanguineous discharge from the vagina occurred, and continued uninterruptedly until February 5th, the day before she was first seen by Dr. Edis.

She remained in bed on the 16th, and on the 17th passed two clots *per vaginam*. These were examined, but consisted merely of coagulated blood.

On the 20th she hurried to church, and when there became so ill that she could not move, even to come out, but remained until the service was over.

On the 21st she experienced another severe attack of pain at 5 p.m., accompanied by a rigor. At this time there was pain on micturition and defæcation.

During the latter part of January the patient was very restless and slept badly; there was only transient nausea, not specially in the early morning. The breasts became fuller and the patient also herself volunteered the statement that although she never experienced sexual orgasm, cohabitation had lately been more pleasurable than ever she remembered before. About this time her friends noticed how well she looked, and complimented her upon her appearance.

During January the bowels, always inclined to be costive, were more stubborn than usual. When first seen on Wednesday, February 6th, there was nothing special in her appearance to denote that anything was wrong. Always somewhat pale and anæmic, she seemed in very good spirits, and detailed her symptoms in a most graphic manner. She told me she had walked from her own house to my consulting room—a distance of about one mile—without experiencing any undue discomfort.

On examination, *per vaginam*, the uterus was found to be bulky—anteflexed—pushed over to the left side by a tense cystic mass in the right. On careful conjoined manipulation some slight tenderness was experienced in the right iliac fossa. The cervix was somewhat softer and more fleshy than normal. The uterus was mobile, as also the cyst, which was about as large as a hen's egg.

The mammæ were only slightly developed, but more so lately than usual, according to both the patient's and her husband's account. Blue veins could be distinctly seen mottling the surface. The areolæ were slightly pigmented and

the follicles more distinct than usually noticed in the unimpregnated. The nipples were prominent and a slight serous fluid could be expressed on pressure.

I desired the patient to send her husband, a medical man, to see me the same evening, and told him plainly and decisively that I regarded the case as one of extra-uterine gestation in the right Fallopian tube, and urged the advisability of resorting to operative interference with as little delay as possible.

He assured me that she had experienced a similar attack some two years ago—she became faint and blanched, and was profoundly anæmic for months afterwards: He further told me that she had been reading my book, and had on different occasions evidenced peculiar mental symptoms, when her statements were quite inconsistent with actual facts. She had twice attempted suicide. As there were no facilities for operation at her home, I had her admitted to a ward in the Chelsea Hospital for Women on the following day, February 7th, and had a consultation with some of my colleagues upon the case. The idea of extra-uterine gestation, although deemed to be possible, was not considered very probable.

As the patient was in no present discomfort, and according to my calculation was at the furthest ten weeks advanced in pregnancy, it was decided to keep her quietly in bed for a few days and watch her symptoms; the operation being fixed for Monday, the 11th.

On the 9th there was some local pain in the right lower abdomen, which was relieved by a poultice, the sanguineous discharge continuing.

At 11.45 a.m. she had an acute attack of pain together with vomiting, the pain not being so distinctly localised as hitherto, but extending up to the navel.

At 5.45 p.m. another attack of pain occurred, which was sharp and severe, the patient becoming blanched and cold pulse 96, temp. 97.4°F.

I was telegraphed for, but was out at the time, and did not receive the message until nearly 7 p.m., when I went on and arranged for immediate operation.

Operation.—Dr. Schacht gave ether, Dr. Rutherford assisted me, and Dr. Travers also was present. On opening the abdomen there was a rush of thin, dark, venous blood, which evidently had nearly filled up the abdominal cavity. Some sixty ounces of this were collected, but there was probably much more all told. The right broad ligament was at once transfixed and tied securely in two portions. The peritoneal cavity was then washed out thoroughly with hot water at 110°F., and the cyst and tube removed. All superfluous fluid was sponged out, a drainage tube inserted, and the abdominal wound closed with silver sutures.

The patient never thoroughly rallied, the heart's action being very feeble, and she ultimately sank at 6.45 a.m., ten hours subsequent to the operation.

On examining the specimen it was seen to consist of an ovarian cyst, the size of a hen's egg. Above this the right Fallopian tube was enlarged to the size of a walnut by an extra-uterine gestation cyst, which had ruptured at the other end. The orifice of the Fallopian tube itself was patulous and blood exuding from it.

Mr. TAIT said the case was very instructive. Dr. Edis had emphasised everything he had said in reference to extra-uterine pregnancy except in one respect, as to which he had misrepresented him. He had never said that extra-uterine gestation had never been recognised prior to the period of rupture. What he did say was that he himself had never recognised them. There was a very good reason for that, for with one exception he had not seen them until rupture had taken place, and in that one case he had mistaken it for something else. He begged Dr. Edis to make the distinction.

Dr. RUTHERFOORD said the case was another which brought into relief the uselessness of electricity. If electropuncture had been employed the needle would have gone through the ovarian cyst and left the extra-uterine gestation untouched. Another point worthy of remark was the practical value of Mr. Tait's direction to go straight for the broad ligament and so put a stop to the hæmorrhage.

Although the tube looked healthy, on making a microscopical section, he found that the columnar ciliated epithelium was gone and the mucous membrane swollen and full of inflammatory leucocytes.

Dr. HEYWOOD SMITH asked for some information as to the menstruation previous to its cessation.

Mr. TAIT expressed the hope that the preparations of the tube would be drawn and put on record in the *Transactions* of the Society.

Dr. RUTHERFOORD said he would have brought sections of the tube to show, but that no microscopes were available.

Dr. BANTOCK questioned the propriety of operating while the patient was in a condition of collapse. He suggested that if time had been allowed for the patient to rally somewhat, the result might have been more favourable. He remarked that it was a rule in general surgery to wait till the shock had passed off. The hæmorrhage took place suddenly, and the condition of shock tended to arrest it, so that might safely wait. He thought it was an important point to bear in mind.

Dr. EDIS, in reply, mentioned that Dr. Barnes had said that whatever it was it called for an operation. He denied that he had mistaken the lump for the extra-uterine gestation. On the contrary, he told the husband that it might be something of old standing. He said he would take care that the proper notes were appended to the case. He apologised to Mr. Tait for having misconstrued his remark as to the diagnosis never having been made beforehand. When Mr. Tait said that he himself had never made the diagnosis he took it to mean that nobody had, and nobody could, make it. He would admit that it was by no means rare for anæmic women to go long periods without menstruating, but in this particular case, although the patient was undoubtedly anæmic, she had commenced to menstruate at fourteen, and *had never missed a period before*. She used to suffer a good deal at her menstrual periods and was accustomed to bear them in mind

in making her arrangements. As to operating during collapse, he said that if he had not operated then she would certainly have died. The abdominal cavity was full of blood, and he preferred to side with Mr. Tait, who advised immediate operation in such cases. If they waited until the patient felt better, they would not have many opportunities to operate. The patient was quite sensible and urged him to do what was necessary. As a matter of fact she had considerably rallied from what she was soon after the occurrence.

The Society then adjourned.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, FEBRUARY 27th, 1889.

ARTHUR V. MACAN, M.D., PRESIDENT, IN THE CHAIR.

PRESENT : 27 Fellows, 4 Visitors.

The following were elected Fellows of the Society :—Dr. W. W. Leigh, Dr. A. S. Gubb, Dr. G. A. Féré.

The following were proposed for election :—Robert O'Callaghan, F.R.C.S. ; Alexander Russell Simpson, M.D., Edinburgh ; William Warren, Melbourne ; William Alexander Mackay, M.D., Huelva, Spain.

Dr. BEDFORD FENWICK, the secretary, gave notice that a motion would be proposed at their next meeting as follows :
“ In the opinion of the Council it is highly detrimental to the interests of the British Gynæcological Society that its Fellows should advertise their medical works, or allow them to be advertised, in the lay press.”

Dr. EDIS said that by a strange coincidence he was enabled to bring before the Society one more case of extra-uterine foetation which presented several points of special interest. He was called upon to operate upon a case of four or five months extra-uterine pregnancy, which illustrated the differences between rupture into the peritoneal cavity, when there was a considerable amount of hæmorrhage, and rupture between the layers of the broad ligament, that is, extra-peritoneal. Mr. Lawson Tait, who was an authority upon the subject, had laid it down as a law, that in cases of rupture into the peritoneal cavity one was called upon to operate *instantly* ; but in cases of extra-peritoneal rupture he discountenanced the primary operation, except the life of the mother was menaced. He preferred to leave the case to go on to full term. The patient was 38 years of age, a cook in a

large establishment, married only a few months before, and had been unfortunate enough to have become pregnant before marriage. The history was as follows: She had her last proper menstruation in September. It was rather profuse. Coitus had taken place in August. In any case he believed that she had become pregnant of this extra-uterine foetus just preceding the menstrual period of September. The period due in the middle of October did not make its appearance. It was one of those peculiar cases in which an extra-uterine gestation starting in September was followed by an intra-uterine gestation early in October. Although under ordinary circumstances it was the rule not to interfere with cases of extra-uterine gestation which ruptured into the broad ligament unless the life of the mother appeared to be menaced, an operation was necessitated in this case by special symptoms of obstruction. It was situated upon the left side, and the child's head was low down in the pelvis and pressed upon the rectum, causing almost total obstruction together with extreme intolerance of urine. The patient was exceedingly emaciated, suffered from persistent vomiting, and her life seemed to be in danger. A consultation was held *pro forma*, and it was decided to operate. He made an incision in the median line from the umbilicus nearly to the symphysis, and there he found the uterus distended to about the fourth month of pregnancy, and running off from this on the left side was the extra-uterine foetation, the foetus from which he produced. Carefully avoiding the intra-uterine tumour, he made an incision through the cyst and extracted the foetus, which seemed to be about five months old. He left the placenta intact and stitched the walls of the cyst to the abdominal wound, so as to be able to irrigate and drain. The operation was performed on Tuesday, February 12th, and the pressure on the rectum was immediately relieved. The patient had done very well and was then on a fair way to recovery. The only complication so far was the formation of a fæcal fistula. He was unable to explain how this had come about, but he pointed out that the wall of the rectum formed the left wall

of the cyst, and he suggested that as the placenta came away it may have left the hole. The cavity was irrigated every few hours with a solution of sulphurous acid, and on the eighth day they found there was faecal matter in the cyst, evidently due to a small opening which could be seen in the rectum, not larger than a threepenny piece. There were symptoms of threatened abortion during the first few hours following the operation, but they had passed off and the case promised to do well. He mentioned a case which had been related to him recently, one of combined intra- and extra-uterine gestation, at full term. The practitioner, who was in charge of the case, called in a friend to see it with him. The latter recognised the serious nature of the case, and they had a consultation, some nine of them being altogether present. They decided that the proper thing was to perform craniotomy on the *intra-uterine* foetus, though it was still living. The extra-uterine foetus died and the mother also died. He said he had no hesitation in saying that in times to come, when gynæcology took the position it should do, such a horrible narration would not be tolerated. Had the condition been fairly recognised, and had the extra-uterine foetus been removed, all might have gone well ; possibly both foetuses might have been saved, and the mother would have had a good chance. It was worth while for all of them to hear, not only the successes, but also the failures, for the latter were often as instructive as the former.

Dr. ROUTH said they were very much indebted to Dr. Edis for his case, but he did not gather from Dr. Edis whether he had made the diagnosis beforehand that one foetus was intra- and the other extra-uterine. He was certainly quite right in operating as he did, but he wanted to know how it was possible to diagnose beforehand the relative position of the foetuses. He observed that Dr. Edis seemed to attach some importance to the menstruation, that it would only be wanting in cases of extra-uterine gestation for two months, but he had known them go five months. In any case the case before them comprised an intra-uterine foetus as well,

so that it would not apply. He added that it might be possible to detect the presence of two children, but not to make out that one was inside and the other outside the uterus.

Dr. HEYWOOD SMITH asked whether the aperture in the rectum was caused by the penetrating tendency of the placental villi which were attached to the thin rectal walls, or whether it was in consequence of the pressure of the foetal head.

Dr. BANTOCK observed that there seemed to be a positive epidemic of cases of extra-uterine foetation of late, four of them having occurred in a week. He himself was responsible for one of the cases, and he was awaiting the time when he would be prepared to present it to the Society with the specimen duly mounted by the Royal College of Surgeons. The case which occurred in his practice was one of extra-uterine pregnancy on the one side, and of pyo-salpinx on the other, and was doing very well. The case brought forward by Dr. Edis was one to which he might be permitted to allude in order to call attention to what ought to be done in these cases. There were signs of an intra- and of an extra-uterine pregnancy, and the question was debated as to the course to be pursued with regard to the extra-uterine one. At last it was decided that the latter should be removed and the former left. The operator had expressed his regret to him, and had asked him what he would have done under the circumstances. He had already arrived at the conclusion in his own mind that the proper course would have been to have opened the abdomen and performed Porro's operation, at the same time removing the extra-uterine sac, because it was very hard to suppose that in a woman who had been exposed to the manipulation requisite for the removal of an intra-uterine foetation, the extra-uterine sac should not have sustained some serious injury. This is unfortunately what happened in a few days, for sloughing of the sac took place. He said that ought to be an important guide in the future; although two cases of this kind had happened together it might

be thought that it was not likely to happen again for awhile. He said it would be well to lay some emphasis upon the line of treatment to be adopted in such cases. He was certain that Dr. Edis had done the right thing in his case in removing the extra-uterine, and in leaving the intra-uterine foetation to pursue its course, and the progress of the case seemed to support that contention. The occurrence of a faecal fistula was rather unfortunate, but it need not interfere very much with the prospects of the case. Its occurrences could not be explained with any approach to accuracy, although the explanation as to the placenta being situated on the bowel that was injured showed how easy a matter it might be for a rupture to take place. He anticipated that the orifice would be closed in a short time.

Dr. FANCOURT BARNES said that the question of faecal fistula, that had been raised by Dr. Edis's case, was an interesting one and also an obscure one, that is, as to its origin. He had recently removed a fibroid tumour with a short pedicle from the left horn of the uterus, and the patient went on very well for a fortnight, and he thought she had practically recovered. A faecal fistula, however, declared itself, and in about three weeks more she died. At the post-mortem a faecal fistula was found, and he would like to know whether any Fellows could throw light upon its causation. He could not think how or why it arose. He had heard it said that faecal fistula was a trifling matter and got well, but his patient had died from it. He was quite sure that nothing he had done mechanically could have had any share in its production.

Dr. BEDFORD FENWICK said there was a very simple pathological reason why a fistula should *à priori* occur. Stitches were passed through the peritoneum, which might not only set up irritation, but would set up irritation in any surfaces with which they might be brought in contact. He pointed out that if the bowel were distended, as it generally was with faeces, some part of the gut might be pressed up against the rapidly healing surface and thus become aggluti-

nated to it ; moreover, the pressure of the stitch might easily set up ulceration, and thus cause the fæcal fistula. It was the only way one could explain the fact that they occurred after operations on the abdomen, when the operator was quite certain that no injury had been done to the bowel. That was the theory he had formed in his own mind, and the appearances in a case of the kind on which he had performed the post mortem examination bore it out.

Dr. SINCLAIR said he hoped that when Dr. Edis published the case he would give a very exact account of the symptoms, so as to assist others in making a diagnosis between rupture into Douglas's pouch and rupture into the broad ligament. If it were possible to diagnose that, then he would say that section was not the proper operation in the case under discussion. He had had an opportunity of seeing a case very much like the one in question, viz. : bursting of the sac into the folds of the broad ligament. His friend who had charge of the case operated very much in the same manner as for stone in the bladder, through the perineum. Personally he would have preferred to operate through the vagina. Having made his incision, his friend passed his finger through the cellular tissue and reached the sac. He drained it, and the next day he cut away the greater part of the fœtus. A few days later he removed the placenta, and the patient made an excellent recovery. The great question was, whether they could diagnose between the different forms of rupture.

The PRESIDENT observed that the diagnosis was hardly given, and the whole difficulty, as far as he could see, lay in the diagnosis. When there was no doubt as to the diagnosis, there could be no doubt as to the treatment.

Dr. EDIS said the fœtal head gave the impression that it was situated in the left iliac fossa. The fistula formed when the placenta came away six days later, and presumably some of the tufts of the villi had penetrated it. He had taken care to prevent any distension of the bowels. He admitted that there might have been some adhesion to the stitches. He

insisted upon the fact that in ordinary extra-uterine foetation the patient usually only missed one or two periods, and then gets a more or less persistent sanguineous discharge. He added that he intended to bring the case before the Society later on with all the data. The symptoms of rupture were very slight indeed. She missed her period in October, and in the latter part of November there was evidence of something wrong having occurred. She was then single, and on going up to bed one night she felt a sharp pang on the stairs and fainted right off, remaining in that condition until some one coming in late found her lying there. She remained in bed for some thirty-six hours and then resumed her laborious employment. In reply to Dr. Routh he said that what made him think that they had the complication to deal with was that the tumour commenced on the left side about one inch from the crest of the ileum and extended over to the umbilicus. The tumour was hard and smooth. When they passed the median line the hand suddenly dropped in, giving the idea that the uterus itself was considerably distended. The question of its being a pregnancy in a bifid uterus was discarded, because they really had no surrounding wall, such as one would expect. The pelvic wall seemed to form part of the containing cyst on that side. On the right side the outline was much more defined and distinct, and uterine contractions could be felt. He intended to bring forward the full details of the case, which were of considerable interest.

Dr. R. T. SMITH read a paper on a case of hystero-epilepsy :—

In the whole round of the various kinds of treatment which need to be adopted for the diseases which come under our notice as gynæcologists, there is none which causes more thoughtful and anxious consideration than the use of surgical procedures for nervous disorders.

I think, therefore, a complete statement of the reasons which led me to remove the ovaries in this case may be interesting.

The patient is twenty-five years of age, and of a most

sanguine and nervous temperament. Before becoming subject to hystero-epileptic attacks, and even in the intervals of them for the first three years, she was a sprightly active girl, full of fun and of good works, and free from any morbid egotism—in fact this may be affirmed of her to the last. Menstruation commenced at the fifteenth year, and with the exception of an early amenorrhœa of six months was perfectly regular, the interval being but twenty-one days, and the loss habitually free. In her eighteenth year she first began to suffer from fits. She attributes the first one to overwork and strain induced by being engaged in a sale of salvage stock when the shop was so crowded that the doors had to be closed. From this time they have never ceased, with the exception of a period of two months following the treatment by intra-uterine applications to be mentioned by-and-by. During the first two years they would occur once a month or so, and with a clear association with the menstrual period. They gradually increased in frequency, and in one week, in the spring of 1888, she had nineteen attacks. At home, in the street, in church, in the day-time, in the middle of the night did they happen. I think the term hystero-epilepsy was rightly applied to them. Although wanting the complete unconsciousness of the *haut mal*, and, as far as I know, never assuming the type of the *petit-mal*, wanting, too, in the involuntary evacuation of the rectum and bladder, yet they were of the type known as epileptiform. They would commence suddenly, yet her friends could see they were coming on, in a series of rapid movements of the limbs, and shaking of the body generally, and then pass into the most violent action of the arms, the patient striking her chest the severest blows, and on one occasion pushing two nurses clean over with her legs. Once she jerked herself out of bed by a somersault over the foot of it. She would then hold her breath, with the head arched back, until she became livid, with the eyes wide open and pupils dilated, and fall back completely spent, but I do not think ever really unconscious, except on some occasions, when she would be cataleptic,

assuming a most pleasing aspect ; at other times she would scratch and tear in pieces anything that came in her way ; at these times she said she remembered nothing. Five or six minutes was about the duration, but occasionally the fits would be repeated, so lasting for twenty minutes. I never found that pressure on the ovaries arrested the attacks, but on pressure in that region under ordinary circumstances she frequently said, "Don't do that, it will send me off." She had practically none of the common symptoms of hysterics —no globus, no flatulence, no analgesias nor anæsthesia, nor morbid cravings either for food or for sympathy. All kinds of medicinal remedies having been tried, an internal examination was made which revealed an acutely anteflexed, very soft uterus. The internal os was the most sensitive spot, and on many subsequent occasions, as treatment was being carried out, the passage of the sound through the os started the convulsions.

For months and months Dr. Hewitt's cradle pessary, and stems were tried in association with medicines of all kinds. All proved futile, the uterus doubling over the ring of the cradle, and resuming its anteflexion directly the stem was removed, even after a month's wearing of it. I may say also that it was a work of the greatest difficulty to find a stem that could be kept in position.

Patient and doctor were now about equally weary, and she was sent to the seaside for six months in the hope that her general health would improve, and the tissues of the uterus would attain some strength and resilience. This hope was to some extent fulfilled, but the attacks did not disappear. I now adopted a plan which has given me better results than the use either of pessaries or stems in cases of chronic flexions with soft tissues. I refer to the process of dilating the uterus moderately, say to No. 14 catheter extent, and then applying iodized phenol to the interior once a week. From this treatment she certainly seemed to derive benefit, the menorrhagia diminished, and for eight weeks she had no attack.

Meanwhile the patient's sister had come under my care suffering from attacks of a similar character, but occurring only at long intervals. The attacks also in her case were more of a cataleptic nature, and less marked by convulsion; on one occasion she had one in a church, and did not remember any of the circumstances of her removal home, nor of the search that had to be made in her pockets to find her name and residence. She married, and about the fourth month had a miscarriage. I went into the country to see her, and found she had retroflexion of the uterus. The loss of blood had been extreme. The uterus was enlarged, tender, and intensely blue. The left ovary was painful. The patient was highly hysterical, constantly moving her jaws as if chattering, but refusing to speak, or put out her tongue. At this time also she had more severe convulsive attacks. In spite of all treatment she gradually drooped in strength. The anorexia and feebleness became extreme; her convulsive attacks left her half dead for days; her mental powers rapidly failed, ending in melancholia; she wasted away to a skeleton—in fact to a most pitiable object—and died in five months. There was a strong presumption to look upon this as some cerebral malady, *e.g.*, tubercular disease, but she had never any local symptoms whatever, as headache, nor any palsy of any kind. This is now five years ago, and I remember distinctly saying to myself, I will never allow your younger sister to die in this way without exploring the abdomen. At that time oophorectomy was only just beginning to win its conquests.

To recur to my present patient. Her condition was fluctuating; she had another long holiday in the country, and had a course of massage, but in the spring of last year she had again completely relapsed, the improvement from the intra-uterine treatment having been but temporary. The attacks were severe and distressing; her features would be most violently distorted, her lips were livid, she bruised her chest and limbs with the violent movements of her fists, her strength was exhausted; emaciation now set in and she was

obliged to be in bed for several weeks. Mild symptoms of mental irritability also set in, and were noticed by herself. The menstruation was still excessive, often for eleven days every month ; the uterus still anteflexed, and three inches in length, giving now more the feel of a small fibroid nodule in the anterior wall of the fundus. Nothing abnormal could be felt in either *cul de sac*, and all along there was no dysmenorrhœa. The most careful examination failed to reveal any disease elsewhere. Temperature normal ; no chest signs, no cough, no diarrhœa, no signs of any pelvic or intestinal inflammation. The family history was inauspicious, her father having died of phthisis at forty-seven ; a sister of the same disease at seventeen ; the history of the second sister I have mentioned—she died æt. twenty-seven. The case certainly did not fall into the category of ordinary hysteria, nor could it on any sure ground be considered as one of tubercular meningitis, cerebral or spinal ; I therefore relegated it to a class described by Sir Wm. Gull as *anorexia nervosa vel hysterica*. Dr. Wilks and Dr. Hilton Fagge have also recorded cases of hysteria terminating in extreme emaciation and death, in which post-mortem histological examination has discovered no lesion.

The menorrhagia also claimed distinct and definite attention. These facts therefore, coupled with her sister's history, led me to determine to remove her ovaries, if consultation with others sanctioned it. I therefore asked Dr. Bantock to see her, and he thought it justifiable. Some of my colleagues who witnessed the violent hystero-cataleptic attacks sanctioned the proceeding, some hesitated. I therefore, not only with the patient's assent, but at her earnest wish, operated in the beginning of December last. There was no difficulty, and the subsequent history was uneventful. (The temperature never exceeded 99°. She had a sanguineous flux for three days after the second day.) Her progress was very slow, but has been uninterrupted. At the end of ten weeks she is up and about at home superintending the household. She says she feels quite well, though weak ; she is gaining flesh, has had

no attack of any kind, has had no menstrual period, though feeling some of its usual prodromata at the time it was due. Both tubes were very long, and of larger dimensions than usual; they were removed close to the uterus. The right ovary was distinctly large, quite half as large again as natural; the left is of average size. Both are distinctly cirrhused in the central region, and have numerous cystic cavities near the periphery. I shall feel it incumbent on me to report progress in about six months, but meanwhile I think we may deduce this lesson, that while hysteria is frequently a disease that may be safely left to moral and general treatment, it is also sometimes a very serious disease in itself, and demands energetic and indeed surgical interference.

Dr. BARNES said they were in the way to more definite information than they were some years ago, as to the nature of anorexia nervosa or hysteria. He asked whether the cases reported by Gull, Fagge and others, of hysteria without local disease, had been examined in the presence of a gynæcologist; otherwise he would demur to accepting those cases as proof that hysteria could arise independently of pelvic disorder. The manifestations of hysteria were symptoms only, and if they failed to ascertain the cause it was because their skill was not sufficiently exercised, or because there was still something to learn in relation to the pathogenesis. They had no right to put hysteria down as a disease and be satisfied with that word as a diagnosis. When properly treated by local measures hysteria often disappeared. The statement that such cases often required surgical treatment was full of truth and hope.

Dr. BANTOCK thought the Society was very much indebted to Dr. Smith for his very interesting paper. He said it was well known that the surgical treatment of these so-called neurotic cases had not hitherto yielded the results hoped for, but he thought it was because the cases were not properly selected. He referred particularly to the cases of true epilepsy which had been operated on. Although he was fortified by the result of treatment in such cases as he had alluded to,

and which tended to show that there was but a very small chance of arresting the attacks by operation, yet in such cases as that recorded by Dr. Smith there was a fair field of usefulness, since the cases belonged to quite another category. He had seen the patient at Dr. Smith's request, and had come to the conclusion that there was strong reason for concurring in the course adopted by him. Before expressing an opinion he had, of course, examined the patient, and that had sufficed to bring on one of the attacks which happened to be particularly severe. The attack did not present to his mind the characteristic features of epileptic convulsions, and he agreed with him in calling it hystero-epilepsy, and not pure epilepsy. The association of the attack with the examination of the pelvic organs led him to express his opinion at once in favour of removal of the appendages, and he believed that the result would be satisfactory. Although he had suggested to Dr. Smith that it would perhaps be better to wait awhile before bringing the case before the Society, he was quite satisfied with his promise to report the case on a future occasion. He was not prepared to say that the specimen showed a condition of disease such as they might have expected to find in association with such a case, for there was not much evidence of disease, although there was a marked difference in size. One ovary was rather larger and the other rather smaller, but beyond that there were no very striking changes. He did not know, however, that it was necessary to justify the operation that they should have very distinct evidence of disease in the ovaries. What they required was the association of these attacks with some condition of the pelvic organs, and particularly of some association with the menstrual function.

Dr. FANCOURT BARNES concurred in Dr. Smith's diagnosis. He said he had seen several of these cases in Professor Charcot's *clinique* at Paris, and the attacks had always been far longer than in genuine epileptic attacks. Moreover, he had never been able to convince himself that the patient ever completely lost consciousness during the attacks, whereas, in true epilepsy the patient evidently lost consciousness. He

had had an exactly similar case to this one two years ago. The woman had an attack one afternoon and had to be held down; it lasted over ten minutes. The diagnosis in that case rested on the duration of the attack, for in hysterio-epilepsy it was prolonged and consciousness was never entirely abolished.

Dr. BEDFORD FENWICK pointed out, with reference to the term anorexia nervosa, that the term nervosa was simply a term to cover the fact that nothing was known about it. They almost invariably found atrophy of the gastric tubules. Hysteria, looking at it from a broad medical point of view, was undoubtedly due to disease, and that disease must be due to some unstable condition of the nervous system. He asserted that very distinctly, because he had had cases of heart disease and phthisis in which the patients got marked attacks of hysteria simply caused by the inability to control themselves owing to acquired debility. In heart disease patients were well as long as the heart was quiet, but directly it began to fail then the hysterical attacks came on. It therefore came to this, that if it was due to disease of the pelvic organs its immediate cause was a deterioration of the general health. He thought that was a very important thing to recognise before they went in any further for operating to cure hysteria.

Dr. HEYWOOD SMITH observed that the ovaries produced, in his opinion, showed marked evidence of disease.

Dr. BANTOCK explained that he did not say that there were no signs of disease, but that there was no diseased condition that could be associated with causation of the attacks.

Dr. HEYWOOD SMITH, continuing, said that they did not know at present what condition of the ovaries stood in relation to pathology in disease. In true cirrhosis one got a contraction of the stroma. What had struck him was the condensation of the interior of the ovaries, and the cystic formation which ran round the border of the ovaries. Moreover, the remarkable difference in size constituted a pathological condition.

The PRESIDENT said the issue seemed to be uncertain, so that they were not yet enabled to say that the other condition depended upon the condition of the ovaries. If they got hystero-epilepsy without disease of the pelvic organs, then the diagnosis of the cases must be made upon the condition of the pelvic organs. To take out the ovaries in every case of hysteria would evidently not be right. First of all, therefore, they must show that it was dependent upon disease of the ovaries, and then diagnose the condition of the pelvic organs on which it was dependent. In that particular case, nothing seemed to have been diagnosed with respect to the ovaries prior to the operation, although the diagnosis ought always to be made beforehand. He did not think ovaries ought to be removed with respect to which they knew nothing.

Dr. R. T. SMITH, in reply, pointed out that the patient had been under his observation for six years, and every kind of treatment had been resorted to in vain. He had a great objection to the removal of ovaries for hysteria, except under great provocation. He had asked himself what more he could do to relieve this distressing condition. He added that while he was in attendance on this patient, her sister developed the same symptoms, to which she had ultimately succumbed, and he had made up his mind to do his best to avert the same fate in the other. He thought Dr. Bantock would have laid more stress upon the fact that the patient was subject to extreme menorrhagia, which alone was a justification for the operation. He had made no diagnosis of the condition of the ovaries before operating, because they had not yet attained that skill in making out the condition of the pelvic organs that had been attained in the school of which their President was such an ornament. He was led to operate, because he felt that the source of the reflex excitement must be in the utero-ovarian system. Everything else had been tried, and he wished at any rate to stop the menorrhagia, and possibly, at the same time, the hysteria. As to the physical condition of the ovaries, he could not say much more. He thought the outer borders of the ovaries were certainly

diseased, and one of the cysts was filled with blood, and was very much larger than an ordinary Graafian follicle. The centres were very white and condensed; this was the beginning of cirrhosis. With respect to the cases he had quoted, he did not think that anything was said as to special care having been taken to recognise any disease of the uterus, &c., but Dr. Fagge had distinctly stated that there were no diseased appearances of any kind. He did not wish it to be thought that he was an advocate of the removal of the ovaries for hysteria. He had only done it in one other case some years ago, and that time with permanent relief of the symptoms.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MARCH 13, 1889.

THOS. M. DOLAN, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT : 23 Fellows, 3 Visitors.

The following were elected Fellows of the Society :—
Dr. R. O'Callaghan, Dr. William Wanen, Professor A. R. Simpson, Dr. W. A. Mackay. The following was proposed for election : George Trew Cattell, M.D., Hitchin, Herts.

The SECRETARY read the report of the last meeting of the council, at which the following resolution was passed :—

“In the opinion of the Council it is highly detrimental to the interests of the British Gynæcological Society that its Fellows should advertise their medical works or allow them to be advertised in the lay press.”

The opinion of the Society was asked on the foregoing resolution.

Mr. LAWSON TAIT moved that “the Society approves and hereby adopts this resolution of the Council.” He said it must be within the memory of all the Fellows of the Society that as recently as twelve or fourteen years ago, it was not regarded as an offence against professional custom to advertise professional works in the lay press. Of late years an evolution had taken place in this matter, and it was now regarded as a thing not to be done. Both the Royal Colleges had expressed their disapproval of such a proceeding. He pointed out that their department of practice was one which lent itself peculiarly to the practices of charlatans, and every care should be taken to check anything which would tend to lower them in the eyes of their fellow professional men and of the public. The subject was one upon which he felt very

strongly. He did not think there was any necessity to illustrate his argument by any examples, and he would content himself with asking the Fellows to endorse the resolution of the Council.

Dr. BANTOCK said he had great pleasure in seconding the motion. After what Mr. Tait had said in support of the resolution, he did not think he need detain the Society with any remarks of his own.

The motion was then put to the vote and adopted unanimously.

Mr. TAIT said he must congratulate the Society upon having obtained the adhesion of the Professor of Midwifery of the University of Edinburgh as a Fellow of the Society.

Dr. BANTOCK then showed a specimen, which he said raised the question of the removal of fibroid tumours of the uterus. The question had been raised as to the class of cases most suitable for removal of the appendages, and those best dealt with by hysterectomy. The case in hand belonged to the class of soft fibroids which sometimes attained such enormous dimensions and demanded removal. They were very rapid in growth. In the case in question, the existence of the tumour had only been noticed a few months before. It was situated in the right broad ligament and was adherent to the right side of the uterus, as shown by the red surface in the specimen, about the thickness of the thumb. It was shelled out of the broad ligament with the greatest readiness, until he got down to the pedicle, when he had to apply a ligature. The patient recovered without a bad symptom. She was a single woman forty years of age. He had operated on the fourth of the month, and she was now quite convalescent. The tumour weighed three pounds three ounces.

The second specimen illustrated another subject of recent discussion. It was a case of twisted pedicle of a dermoid cyst. The Fallopian tube, which was seen on the surface, was in an œdematous condition. It illustrated the remarks he had made some time ago, when Dr. R. T. Smith brought forward a case of twisted pedicle. The patient had been

brought to him about three weeks ago in a very distressed condition. She had been seized a week before with sickness, accompanied with severe abdominal pain and some shock. He discovered a tumour in the lower part of the abdomen, more particularly on the right side, and at once ventured on the diagnosis that the symptoms were due to the twisting of the pedicle of an ovarian tumour. It was only on that day that he had been enabled to operate on her. He recalled that, when the matter was under discussion, he had expressed the opinion that it was not advisable to operate upon the patient while she was suffering from the immediate symptoms of twisting of the pedicle, and particularly to the accident that usually accompanied twisting of the pedicle, viz. : hæmorrhage into the sac, which appeared to have more to do with the production of the shock than the twisting itself. In this patient, the pedicle was twisted about one and a-half turns. It was not absolutely strangulated, but it was pretty nearly so, and there had been hæmorrhage into the small cavity at the time of the accident. He thought that Dr. Smith's case supported his contention that it was unwise to operate during the continuance of the shock and acute symptoms. He could point to another case in the same condition, and with the same result as in Dr. Smith's case. He thought it was best to allow such patients to remain quiet for some time, in order that the acute symptoms might subside. A tumour, if completely strangulated, would contract adhesions to surrounding structures, and its death would thus be prevented. This conclusion had been the result of his invariable experience. He had never seen a patient die from a twisted pedicle, or from hæmorrhage into the interior of the sac, nor had he ever heard of such a case. Until he either saw or heard of this happening, he would continue the views he had enounced. That was not the first instance in which he had diagnosed this condition, for it had repeatedly occurred to him to have been enabled to diagnose it beforehand. His diagnosis in that instance might be confirmed by a gentleman who was present, and who had assisted him in the examination. The

operation revealed a condition that is almost invariable, viz. : that adhesions to other structures had taken place, and although only three weeks had elapsed, very extensive adhesions had taken place. The tumour still retained its vitality, although most of its nutrition was derived from those adhesions. One argument in favour of a little delay was that in the recent state, when the adhesions were commencing, one was much more likely to get peritonitis continuing after the operation, than if they performed the operation after the acute peritonitis had subsided. He had every confidence that the patient would do well ; as well, indeed, as all the patients he had treated on those principles.

The PRESIDENT asked Dr. Bantock whether he had understood him to say that there was shock with or without hæmorrhage.

Dr. BANTOCK, in reply, said he was not quite sure in his own mind whether the shock was contributed to by the hæmorrhage or the twisting the pedicle or not ; the tension induced by the hæmorrhage had a good deal to do with it. The amount was sometimes very small, and then the shock was correspondingly slight. In some he considered that the shock was due to the loss of blood and the tension induced by its escape into the sac.

Mr. LAWSON TAIT said he could give a melancholy example of the results of leaving uterine fibroids alone. A lady, sixty years of age, was sent to him from Nottingham with an enormous soft œdematous myoma. Twelve years before she had been to consult Sir Spencer Wells, who for some reason advised that nothing should be done. The patient went on bleeding continuously, her menstruation being practically continuous. The tumour went on increasing in size, and when she came to him on the 10th of December last, it was of an enormous size. He advised immediate operation, warning, however, the patient that in her exhausted condition recovery was materially interfered with. She nevertheless eagerly requested the operation, as did her

husband; he therefore operated, shelling it out as easily as possible, but the shock was so great that the patient never rallied from the operation, and she died about thirty-six hours after. He asserted that if the patient had been operated upon ten years earlier, when she was fifty, instead of sixty, and with ten years less of suffering and hæmorrhage, her chances of recovery would have been materially increased. As to the other points, he and Dr. Bantock were not so much agreed; he had seen thirty or forty cases of twisted pedicles of parovarian tumours, and he was strongly of opinion that it was the twisting that caused the shock. He had seen the severest shock without a drop of hæmorrhage. In a case he had to operate upon a few days after rupture, he had seen serious rupture hæmorrhage with shock, but the balance of evidence was in favour of twisting as the cause of the shock. His rule was to operate as soon as he could get to the patient, and he had not lost a single patient. The only case of twisted pedicle under his care which proved fatal was one in which he did not operate, or rather he had operated in a very bad way. He must plead his youth and want of experience as an excuse, for he was then only about twenty-one, but the fact was that having found a lump in the patient's groin, she being collapsed and vomiting, he regarded it as a case of femoral or inguinal hernia, and operated for that as he then thought successfully. At the post-mortem it turned out that it was not a hernia at all, but a small hammer-headed tumour of two cysts, which had twisted and become hæmorrhagic, and the patient died from shock. It was not the amount of the hæmorrhage in that case that had determined the shock, for she could have lost two or three times the amount of blood without hurt.

Dr. R. T. SMITH asked Dr. Bantock how long after he found the patient suffering from shock he had operated. Also had the mischief any relation to the catamenial period? He mentioned that in both his own cases the twisting occurred when the patient was unwell, and in the course of a few days from the symptoms the shock began to pass off. In both his

cases, too, the tumours were very large—one reaching fully three inches above the umbilicus. He asked whether there were any adhesions in the case of some standing. In his first case the patient had been tapped some months before, and the folds of the collapsed tumour were agglutinated to each other. He thought in contracting they might have had something to do with the twisting. Their pathologist was also of opinion this might have been the case. He considered it was important to get facts bearing on this point. In the case that died, they would remember that she had pronounced renal disease in the form of granular degeneration. They found afterwards that the patient was addicted to drinking. In neither case did he operate for three days after the symptoms, and in the last case the patient had rallied very materially. In fact she was so much better that he had thought it as well to postpone the operation until the following morning.

Dr. EDIS, in relation to the first specimen, said that such fibroids were very rapid in growth, and sometimes obscure. He had removed a very large one last year. It had grown very rapidly, and one symptom that another gentleman relied upon to prove that it was not a fibroid was that there had been absolute amenorrhœa. The tumour was four or five times as large as the one shewn, and yet the patient had not seen anything for the previous twelve months. The removal of such tumours was the only thing to do. He mentioned the case of a young lady who had consulted a practitioner. She was not cognisant of any tumour in the abdomen two months before she came under observation, and the question was even raised as to whether it might not be a case of pregnancy. The catamenia, however, had been quite regular. An operation was decided upon and carried out, and with the most disastrous results. In another case, also a single woman, the practitioner had stipulated that he (Dr. Edis) should only remove the ovaries, but he had declined to go into the operation with his hands thus tied: the ovaries, to begin with, could not be found, and

in any case he would have removed the tumour as he did in that case. All tumours did not require to be removed. There were some slow-growing tumours that might very well be left without interference. He had seen a case a few weeks ago in which the surgeon had told her mother that the girl was pregnant. He thought that such a case was more interesting to general practitioners than many of the others. All men were not ovariectomists. What they wanted was a first help in time of need ; to know what were the points they ought to take up, and how to distinguish between fibroid and any other tumour ; also to distinguish between those which might be operated upon and those which were best left alone.

The PRESIDENT said the diagnosis was always difficult, especially to the general practitioner. He related a case of which he had heard as a set-off to the remarks of Dr. Edis, viz. : a very well-known man came down to the country to give his opinion in respect of a case, and after a careful examination he decided to operate the very next morning, but unfortunately in the night the girl was delivered of a baby.

Dr. MACNAUGHTON JONES said it would be a very difficult thing to draw a sharp line of demarcation, as suggested by Dr. Edis. For his own part, no matter how often he operated he always considered himself a practitioner. He said that practitioners were at great pains to arrive at a correct diagnosis, and before concentrating their attention on endeavours to prevent his making mistakes they might do well to look nearer home.

Dr. RUTHERFOORD said he thought that shock and vomiting were associated with extravasation into the walls of the cyst. He pointed out, however, that Mr. Tait's theory as to the twisting causing the collapse, that in many cases when the pedicle was tied in ovariectomy, &c., the patient had shown signs of collapse. He thought that fact bore out the views of Mr. Tait. The twist was either sudden or gradual, and in the latter case the tissues got used to it, whereas when the twist was sudden the symptoms were correspond-

ingly severe. The difference was akin to that observed in gradual and sudden obstruction of the larynx.

Dr. BANTOCK, in reply, said that three weeks had elapsed between the advent of the symptoms of shock and the operation. There was no connection between the occurrence of the twist and menstruation, nor could he remember any such connection as having existed in any of the many cases which he had been enabled to observe. He said he had pointed out that the shock might depend upon the size of the cyst, because in a small cyst like the one before them they could only get a small amount of hæmorrhage and therefore only a small amount of shock, whereas in a large cyst there might be an enormous loss of blood. The patient might be blanched and the tumour might be so tense as to present all the appearances of a solid tumour. In such cases the shock was likely to be very marked. He did not bind himself to either explanation. He was quite prepared to admit that it was the twisting of the pedicle that caused the shock, but at present it seemed to him that the hæmorrhage had more to do with the shock than the twisting.

Dr. Routh's New Wire Directors.

Dr. ROUTH described a new wire director which he had had made by Messrs. Krohne & Sesemann for the better removal of polypi or fibroids when very large and when projected into the vagina by the uterus, and, indeed, which might be used perhaps when they were still intra-uterine.

The instrument consisted of two parts:—(1) An internal sound-like cylinder, and (2) an external sheath, both metallic. This sheath (*a*) fitted completely round the cylinder inferiorly for about two-thirds of its length, but (*b*) was deficient in the upper third anteriorly, being there connected round the internal sound by a ring only of sheath. This sheath, by means of a circular button inferiorly, could be moved up and

down upon the internal sound or cylinder. At the apex or distal end of the internal cylinder, as well as at that of the sheath, were attached respectively a knob with a groove, the concavity of the one being opposed to that of the other, so that when the sheath was moved upwards on the cylinders, the two concave grooves, like two halves of the letter C coming in contact, constituted a foramen or aperture like a large needle hole, and when moved downwards the needle hole became as before two concave grooves.

The application of this wire director was as follows: Supposing we had to do with a large intra-uterine fibroid or polypus, which had been forced down into the vagina, and it might be so tightly jammed that the wire could not be pushed up with the finger—perhaps it might be impossible to push up a finger at all; a long piece of wire would then be passed through the apertures of *two* of these instruments placed side by side, the ends of the wires being long enough to project beyond their handles inferiorly. The two instruments were now pushed up together by the side of the tumour as high as thought prudent or practicable; one of these instruments being then held in one hand, the other was carried with wire attached to it horizontally round the tumour, till it reached the other side of the other wire conductor. The wire was thus placed completely round the tumour, the two conductors side by side and the two terminal ends of the wire projecting inferiorly beyond the vaginal opening.

Next these ends of the wire were placed and properly adjusted on an ecraseur, which might be the ordinary wire ecraseur or a galvanic cautery ecraseur. Guided by the wires the distal ends of the ecraseur were brought to the apertures in the two instruments. The outer sheath of these last was then pulled down, and thus the instruments disconnected from the wire and removed altogether. The wires now *in situ* were tightened on the ecraseur, and the process of separation and cutting of the tumour could be commenced at once.

Now, when the tumour was very large and hard, the

ordinary ecraseur would scarcely succeed, one wire breaking after another. Dr. Routh instanced a case of this kind, that of a lady in whom he had foreseen that the tumour would be forced down into the vagina, but as the lady lived in the country, he had warned her that whenever it did come down, she was to let him know at once. Unfortunately the fibroid, which was as big as a moderate-sized adult head, was forced down suddenly, but the practitioner in attendance did not recognise the condition, and he (Dr. Routh) was not called to the case till a week after. On arrival he found the tumour had become gangrenous; the house in its entirety, as well as her bed room, was full of most pestilential odours, and the patient suffering from symptoms of blood-poisoning and almost collapsed. Restoratives, antiseptic injections, &c., were freely used. The stench was greatly got under, and the patient having rallied somewhat, was etherized and submitted to operation. The tumour was so hard that three wires were broken and one ecraseur, before a large piece of the tumour—about half or two-thirds—could be removed, when she suddenly died. Much time was necessarily taken in the adjustment of the wires, at best but imperfectly accomplished, and by the accidents which occurred. With these wire conductors, the adjustment of the wires would have been rapidly and easily accomplished, and with the galvanic cautery and platinum wire ecraseur, it would have been cut through with perfect ease and without loss of blood, and her life possibly saved. Indeed, Dr. Routh had lately tried these wire conductors in a similar case, but, fortunately, taken in time. The application was most easy and the section complete. It was obvious that even in some cases of intra-uterine polypoid fibroids (after previous dilatation of the uterus), by means of these wire conductors, and where fingers could not reach, the tumours might be removed in very *situ*; also hypertrophied cervixes. He (Dr. Routh) had half a dozen of these wire directors made with various curves and straight to suit special cases.

Dr. EDIS said the instrument was ingenious, but very much

resembled Gooch's invention, except that with the latter they did not require two tubes, as with Dr. Routh's instrument, which was a little more complicated:

Dr. MACNAUGHTON JONES expressed his admiration for the identical instrument brought forward by Dr. Routh. It gave them greater grasp, greater power, and greater ease of manipulation.

Dr. GRIGG suggested that the tubes should be made in flexible metal, so as to admit of adaptation to each individual case.

Dr. RUTHERFOORD said he had seen both instruments, and Dr. Routh's was far away the simplest and most effectual; indeed, he could not conceive of any instrument more effectual. It allowed the wire to be kept taut, which was not the case in Gooch's cannula.

Dr. BANTOCK wished to join in the chorus of praise and approval which the instrument had elicited. He pointed out that the suggestion to have the tubes made in soft metal would deprive the instrument of its utility in difficult cases, as it would bend.

Dr. PURCELL said the instrument would be of considerable assistance in high cases of hysterectomy. He had often regretted the want of such an instrument.

Dr. BEDFORD FENWICK asked the price of the instrument, and he advised Dr. Routh to take out his patent at once.

The Use and Abuse of Massage in Gynæcological Practice.

By H. MACNAUGHTON JONES, M.D., M.Ch., M.A.O.,
F.R.C.S.I. and E.

IT is widely known that the therapeutic agent, massage, is largely employed at present in a variety of affections to which women are more especially liable. And not only is this the case in regard to those affections arising from morbid conditions of the pelvic viscera, but the same may be said of

a number of unhealthful states, due either directly to these pelvic derangements, or indirectly following as a consequence of them.

From sources inside the profession of medicine, and from others outside its pale, the public, which in matters of medical fashion often leads the profession, has learned to believe in massage as a marvellous remedial measure; and as in the past in other matters, so now in this, the patient and her friends suggest to the medical man the course of treatment he should adopt. Or they often go further, and, ignoring medical countenance and advice, prescribe this or that plan on their own responsibility. Truly, Mr. Public, once he is gratuitously mis-educated, becomes a veritable tyrant to that profession to which he pretends submission. Nor can we wonder at this vulgar assumption of little knowledge on the part of lay outsiders, when we find such catering for the curious in matters medical, as the periodical literature of the day supplies. We need express no astonishment if some contemporary periodical is, in the near future, laid under tribute for an article on Electrolysis *versus* Mutilation, or Keithism *versus* Tatism.

One of the tests of medical eminence and stepping-stones to popularity is an article on some such quasi-popular subjects as "Massage in Neurasthenia," "Alcoholism and Insanity," "Worry and Gout." Then comes for patient a fashionable favourite or distinguished politician, and then—well, anything. Now it at times happens that a system or plan of treatment, in itself intrinsically valuable and capable of most useful application, suffers materially from such vulgar handling. The unavoidable contamination with Charlatanism, educated and uneducated alike, so soils its utility that many refuse to believe that any good can come out of it. They dislike it, and cannot tell why. They do not allow themselves to inquire into its merits, or, rejecting the good and evil elements alike, lose the advantage which such an analysis would have afforded. So it has been with massage. The system has suffered from contamination. The art of the masseur has

been interpolated with the avocation of the hotel manager, and a resultant of the two occupations is found in the divided spoils of both. Hence masseurs and masseuses have flooded the medical market, and so-called "Homes" for massage are almost as plentiful in certain localities as pawn offices, and, if we are to judge by the theory of "demand and supply," they should be nearly as remunerative. It is a fact not to be disputed at the present moment that in London a large number of women, after acquiring a superficial smattering of the most elementary medical knowledge, go about as electricians and masseuses, earning—after an investment of £5 in a course of lectures or for other as-easily-obtained badge of knowledge, or even without this expenditure of money or trouble—incomes far larger than an M.B. of London University or an M.R.C.S. can hope to acquire for several years.

How far the medical profession is right in handing over to, medically speaking, uneducated hands the practice of the art of massage, is a question I do not care to discuss. But it is an open fact, that highly qualified medical men all over London can be obtained for one-fourth of the sum that a better-class masseuse charges for a visit, and for discharging a duty certainly not more laborious or distasteful than, if as much as, so many of those obligatory on the medical practitioner.

Let us dispassionately, and without prejudice, consider how far massage is useful in gynæcological practice. And in doing so I would ask you to enlarge your view of the "study of a woman" from the limited mental horoscope bounded by the ovaries and broad ligaments, and embrace in your contemplation some of those associated conditions which this study forces us to include.

Permit me to illustrate my meaning by touching here lightly on the outlines of a case which it is my intention, through its extreme interest from some points of view, to publish *in extenso* at a future time.

A lady, about three years since, consulted me. From the date of her previous confinement, three years before this, she

had suffered from constant headache, the pain occasionally being of an excruciating nature. She had never, she said, been a single day without it. There was also present violent periodical menorrhagia. She was a most intelligent woman, and by no means what would be described as of a neurotic temperament. She had been to several physicians. She had tried a number of remedies, including a hydropathic course, and had gone for change of air a few times. The bowel for some time was only relieved by enema. On examination I found a large and completely retroverted womb. I examined both her teeth and eyes for other causes of reflex headache. I discovered that she had a hypermetropic astigmatism of less than a dioptric, though she had an artificially induced myopia from spasm of accommodation. All her imperfect teeth had been stopped, and she did not complain on percussion of any of them. Suffice it to say that this lady has been, on and off, under my care for the past three years, and that though her astigmatism was completely met and the uterine condition cured, the vertex headache persisted to the latter part of the past year. I may remark that amongst other remedies I tried the constant current, Charcot's metal discs, and a course of massage, all to no purpose. Again, about eighteen months since, I had all the teeth overhauled. Last year the teeth again began to pain. She had them attended to by a local dentist, and shortly after came to London for a course of head massage. Without going into details I may say that this visit resulted in the extraction of eleven teeth from the upper jaw, by Mr. Baly, of Harley Street, the discovery of exostosis and partial obliteration of the dental nerve canal in several of the teeth, and subsequent complete cure of the headache. The lady is now in the fourth month of pregnancy. I think this case teaches its own lessons without observation.

I may divide the consideration of this subject thus: first, I must make some necessarily brief and condensed observations on the physiological action of massage, and, secondly, discuss how far these explain the therapeutical application of the art, and finally apply these facts to the practice of the gynæcologist.

I wish, however, to state that these observations bear more particularly on massage in which the patient is passive, including the stabile and labile interferences, either with the hands of the operator (beyond question preferable), or by rollers or muscle beaters, such as those of Klemm, used by some; though it must be remembered that the calisthenic exercises and mechanical aids of what is popularly known as "the Swedish cure," and commonly associated with the name of Ling, cannot be dispensed with in many cases. I allude to those cases in which we desire to avail ourselves of this method of localising and grouping muscular movements and resistances, in associated action, by more energetic and better distributed force than we can obtain by manual manipulation. Such cases, for instance, are those of muscle disuse, following injuries; atrophic tendencies after paretic states, muscle deformities, as in the various talipes, articular malpositions due to neuro-mimesis, injury, adhesions or muscular action, scoliosis, rheumatic sequences in joints.

There is then a second group of cases in which such mechanico-therapeutical means are invaluable, viz., patients of the neurotic type, often with indolent, phlegmatic, hypochondriacal temperaments; this includes the costive, fanciful, capricious, tea-drinking, romance-reading, morbidly introspective class of woman, full of self. What is left of mental exercise resolves itself mainly into a game of shuttlecock between her stomach and her ovary. A little diversity in this amusement is invaluable, and she gets it in the periodically imposed calisthenics. Some of the energy resolved into fat is restored, or that lost to enervated brain and muscle-nerve is regenerated.

I can not delay to analyse and compare the effects of the different kneadings, frictions, strokings, tappings or beatings, known as *pétrissage*, *friction*, *effleurage*, *tapotement*. I must group these various methods of action under the general term massage, and even include with these manipulations certain flexions and extensions or movements that are of necessity often combined with them in practising massage.

Yet the physiological fact must be remembered that the nature of the stimulus, *i.e.*, its character and mode of application, applied to a muscle, influences not alone the kinetic energy of the muscle, but also the force and distribution of the reflex impulses; we do not get the same results with stroking, as we do with either vibration movement or *tapotement*.

With deep kneading we have a different result from that obtained by both of the former acts. Let us summarise, albeit very imperfectly, the more important physiological effects of massage on muscle, nerve, vascular distribution and lymphatic supply.

*Muscles.**—The chemical and physical changes consequent upon stimulation of muscles and muscle action, which modern physiological research has established :

(a) Generation and discharge of carbonic acid.

(b) Absorption of oxygen.

(c) Creation of lactic acid and other chemical changes in the muscle.

(d) Probable slight increase in muscle temperature.

(e) Slight alteration in bulk of the muscle, attended by changes in the blood supply, both in quantity and character.

(f) Generation of reflex impulses. With regard to this effect it has to be remembered, as Foster remarks, that "a muscle, even putting aside the visible terminations of the nerve, is fundamentally a muscle and a nerve besides."

(g) Readier response to electrical stimuli after massage, and probable electrical changes; during massage, excitation in the muscle-nerves excited.

* I desire to express my obligation mainly to the classical Text book, of Professor Michael Foster, in compiling this summary of the physiological results of the various experimental researches which bear on the effects of massage or gymnastic exercises. Also I have had, amongst other sources, special assistance from the excellent manual of Dr. Joseph Schreiber of Vienna, and translated by Dr. Walter Mendelson of New York (Young, Pentland, Edinburgh). Another admirable manual in the English language is the "Practical Treatise on Massage," by Dr. Douglas Graham of Boston (Wood & Co., New York).

(h) An influence on unstriated muscular peristalsis.

Nerves.—Chemico-physical molecular changes in the nerve tissue starting both sensory and motor impulses; these centripetal impulses affect the central ganglia and influence both automatic and reflex actions. The phenomenon of inhibition is manifested. Analgesia is produced by prolonged and continued pressure.

The Vascular Mechanism.—The main effects are to be seen in the peripheral arterial resistance. The peripheral resistance is generally lessened (at times may be temporarily increased) by massage. This is principally due to the following effects: altered nutrition of parts change in the peripheral vaso-motor control; reflex stimulation of the vaso-motor centres; altered blood pressure due to the presence of carbonic acid and loss of oxygen (according to Sommerbrot,* intra-bronchial pressure taking an important part in this action on the heart). These effects are manifested in altered blood pressure and arterial tension, primary diminution, secondary increase.

Effects†.—The heart's beat may be influenced by (a) the local reflex effects on the skin and muscle, or through the abdominal nerves, during abdominal massage, from splanchnic inhibitory action; (b) by the alteration in the arterial pressure, either local or general, brought about by the massage. Such vascular changes are necessarily attended by a local determination of blood, by alteration in the velocity of the blood current, in the metabolic tissue changes, in the nutrition of the parts masséed, in the comparative rapidity of the removal of excrementitious material. More especially important are such physiological effects if manifested in the case of the portal and renal circulations.

Lymphatics.—In deep massage of the extremities, or

* Sommerbrot: ueber eine bisher nicht gekannte Wichtige Einrichtung des menschlichen organismus, Tübingen, 1884.

† See Schreiber's "Manual of Treatment by Massage," page 88 translated by W. Mendelson, M.D., New York.

kneading, the centripetal flow of lymph in the tendon and fascia lymph vascular spaces is expedited. This will be the case also in the tendinous and fascial structures composing a great part of the abdominal wall ; the processes of absorption and resorption are promoted ; lymphatic glandular activity is excited. The same occurs in the more superficial lymph vessels from stroking the skin and vibration movements. During deep abdominal massage a powerful influence must be exerted on the lymphatic vascular mechanism and on the nature of the fluid in the lacteal vessels. This will result directly from the continued or intermittent mechanical pressure exerted through the abdominal wall, independently of the altered relations between the superficial and deep lymph currents and the blood vessels. It must also follow from the effects of massage on the portal circulation. I allude to the more rapid reception by the portal blood of the products of digestion, which find their way into it. This temporary increased diversion of food elements necessarily influences the chyle and the tension of the lacteal vessels. Also in general massage, followed by abdominal, through the continued suction effects of increased respiratory movements and general (primary) diminished venous pressure, the lymphatic flow is temporarily encouraged, while through the nervous influence on the abdominal vascular system generally, lymphatic absorption is promoted.

These physiological facts, necessarily modified by the local anatomical relationships, can be well applied to the pelvic structure in which we, as gynæcologists, are more especially interested.

We may correlate such physiological effects of massage with the more manifest physiological phenomena and effects noticed in its practice.

In order that I may save time, I arrange these latter in tabular form.

(1) Slight immediate changes in body temperature. These are not constant, and vary, with rare exceptions, to the extent of a degree more or less ; of this I have satisfied myself

several times. There is occasionally a fall ; this is not as common as a slight rise.

(2) Decided increase as a rule in muscle nutrition and power of endurance ; increase of muscle weight.

(3) Restoration of reflex excitability in weakened muscles, and the improved association of reflex and automatic action.

(4) Reduction of cutaneous and muscular hyperæsthesia, and relief of pain arising from reflected irritations in distant regions.

(5) Increased effects of galvanism when used after massage, necessitating reduction in the strength of the current, and increased care in its employment.

(6) Improved peristaltic action, as shown in the case of the non-striated abdominal muscles of the intestines and the œsophageal muscles:

(7) Results of improved nutritive nerve changes, as we find in the case of muscle. These are shown in restored nerve function, in healthier brain action, in the production of sleep, in alleviation of perverted and distorted mental symptoms.

(8) The improvement in the tone and character of the pulse under massage treatment ; the good influence on a sluggish circulation, as exhibited in the effect on cold extremities ; the same result in cases of rhythmic irregularity of heart, due to torpid hepatic circulation, flatus, and abdominal obesity. The occasional attack of syncope, which I have had in two instances, is the effect of either a reflex inhibitory stoppage of the heart's beat, or a syncope arising from rapidly lowered arterial pressure. In one patient, vascular and nervous excitement were so pronounced every time head massage was tried, that I had to abandon it. This was shown in suffusion of the face and eyes, sense of weight in the head, great mental excitement, hysterical crying ; these symptoms were followed by corresponding mental depression.

(9) Absorption of fat, loss of weight due to removal of excrementitious material and useless fat, improved digestive powers ; such therapeutic use of massage must be continued

with the enforcement of dietetic rules, and avoidance of fat-forming food.

On the 11th February, I ordered general massage for a lady weighing 15 stone, 1½ pounds, who suffered from cardiac rhythmic irregularity. In a fortnight she had lost 6 pounds, and up to this day, March 13th, 9½ pounds.

Urine.—Interesting in connection with this case is a urinary analysis (No. 1), made for me of the patient's urine—of that passed immediately previous to an hour and a quarter's massage, and of that passed immediately after the rubbing.

No. 1.

				SAMPLES OF URINE.	
				Before Massage.	After Massage.
Reaction ...	...	...		Acidulous.	Acidulous.
Total Solids	...	...	p.c.	5.90	6.55
„ Urea	...	...	„	2.40	3.05
„ Uric acid	...	...	„	.03	.06
„ Acidity	...	...	„	.43	.51
„ Chlorine as chlorides			„	.52	.37
„ Sulphuric as sulphate			„	.12	.15
„ Earthy salts	...		„	.31	.34
„ Alkaline	...	...	„	1.00	1.10
Specific gravity of sample				1021	1028

No. 2.

				SAMPLES OF URINE.	
				Before Massage.	After Massage.
Reaction ...	...	...		Acidulous.	Acidulous.
Total Solids	...	...	p.c.	6.10	6.30
„ Urea	...	...	„	2.55	3.05
„ Uric acid	...	...	„	.06	.08
„ Acidity	...	...	„	not estimd.	not estmd
„ Chlorine as chlorides			„	.62	.74
„ Sulphuric as sulphate			„	.18	.15
„ Earthy salts	...		„	not estimd.	not estmd.
„ Alkaline	...	...	„	„	„
Specific gravity of sample				1026	1027

The analysis was made by Mr. Brownen, F.C.S.

Side by side with this analysis is another (No. 2) made a

day or so before of the urine in a similar case of fat reduction. In this latter case Mr. Brownen did not estimate the alkaline or earthy salts, as fermentation changes might have influenced these and the acidity, as the urine was kept for forty-eight hours previous to analysis.

(10) Resorption of lymph effusions and various exudations; reduction of glandular hyperplasias.

While thus enumerating the physiological effects of massage, as experienced under favourable conditions of temperament and physique, and aided frequently by other therapeutical means—such as galvanism or faradism, baths, medicinal agents, special dietary—it must be stated that the process is frequently attended by various exaggerated or unexpected results in some or all of the directions enumerated which completely contra-indicate its employment. Certainly it is not a course to be prescribed or recommended in a careless or cursory manner.

It should not be entrusted without skilled medical supervision, to the judgment of ignorant men and women, to measure its extent and duration. I understand that we have now in London fashionable massage institutions for men and women, where the consulting masseuse exacts, in the first instance, a fee for prescribing the nature of the massage to be followed, after submitting the patient to the form of an examination. There are rubbers who speak of glands as "knots" in muscles, of tendons as hard "cords," which they endeavour to "disperse;" who rub dislocations for "sprains," "varicose veins" for nerves, "rub" alike the abdomen of the pregnant and non-pregnant. They are above a knowledge of all such trifles as the origin or insertion of muscles, the course of the circulation, the presence of cardiac disease, the nature of an effusion, or the position of the abdominal viscera. Ask such an one if she understands massage, and she cheerfully answers in the affirmative. She "has rubbed several cases for Dr. So and So, who were undergoing the Weir Mitchell plan." She "knows all about it." She "has had some grand cures." She generally speaks of "*her* patients" and "*her* cases."

The "Weir Mitchell" system of "making fat and blood" has not been productive of unmixed good. But one of the evils that has resulted from the exaggerated and impulsive praise it received on importation into this country has been the manufacture of a host of these Brummagen pests of medicine—the so-called "medical rubbers."

They form a sort of link between a medical *vivandière* and *franc-tireuse*—irregularly tolerated but not recognised. It is quite sufficient to give some of these certificated frauds your hand, and ask her how she would proceed to *masser* it, or practise passive resistance, flexion and extension movements on your arm to detect the imposition. The art of massage is not easily acquired by any, never by some, and for most medical men to pretend to do anything like justice to a patient, or to acquire that instinctive sense of muscle resistive force, or the skill in making manipulations, would be absurd. But does it much matter?

I made Pil. Hydrargyri frequently in my apprentice days. I do not know that this fact added to my knowledge of its therapeutic effects. I learned more of this latter from seeing five grains of it once cause severe salivation. If we know the effects and the object of the form of manipulation we advise, it is sufficient in most cases. This, I maintain, we should know. Massage of the ear and eye, for example, I hold should not be practised save by the medical man, or until the latter has satisfied himself of the competency of the masseur.

Once for all, let me say that the massage I am speaking of is *not* "vicarious exercise." It is not because exercise and massage have some points in common that they are ignorantly to be spoken of as substitutes the one for the other. It is somewhat of the crow and blackbird relationship. Massage in some of its methods is a form of exercise, but exercise is not massage. Manual massage differs widely from exercise gymnastic or other, in the nature of the excitation, the power of its limitation to defined areas, the direct action on the blood vessels, lymphatics and nerves; the comparatively

slight evolution of body heat; the passive attitude of the subject; the absence of the more complex actions of a reflex and automatic nature, with the associated cerebral inhibitory supervision, which are the necessary attendants on exercise. The more complicated, or the more finely-adjusted such exercises, the more widely do they depart in their nature from the manipulation of massage. We might as well compare the necessary manipulations and the physical labour or fatigue of the masseuse with the effects on the person masséed.

Therapeutically, we might expect to find massage of benefit in gynæcological practice in the following affections:

(1) Atonic conditions generally, both of muscles and nerves, as, for instance, relaxed abdominal walls; intestinal flatulent distension; chronic tympanitic states; chronic constipation; those forms of general debility and lassitude complicating menorrhagia, subinvolution, and other chronic uterine affections.

(2) In reflex neuroses arising from or complicating morbid states of the generative organs in women; so-called cases of irritable spine; reflex headache; cases of "uterine lameness;" neuro-mimesis of joints, torticollis.

(3) In amenorrhœa and dysmenorrhœa, especially those cases associated with anæmia and chloræmia.

(4) In neuralgias of the pelvic nerves—oophoria, neurasthenic coccygodynia.

(5) In unhealthy fat accumulation.

(6) In masturbators.

(7) In that numerous class of female patients in whom there is no organic disease, and that we group under the terms hysteria, neurasthenia, hypochondria.

(8) Glandular hyperplasia.

(9) Mammary infiltrations, in chronic mammary hardening, in threatened milk coagulation, in mammary neuralgia.

Here I may casually refer in passing to the splendid results I have seen in chronic constipation from abdominal massage. I allude particularly to cases of fæcal accumulation. I believe the proper treatment for the more obstinate

of such cases to be, dilatation of the sphincters, clearance of the rectum, followed by a course of galvanism and deep massage of the abdomen. Nearly three years since I pursued this course in a lady who came to me from Australia, who had exhausted all aperient remedies, and who had not for four years had a natural motion. I saw her again last year. She had abandoned aperients. A course of belladonna and nux vomica should accompany the massage.

I have here purposely included only those affections in which I have had ample personal proofs of the benefit of massage. I do not in any observations I make refer to combined internal and external massage, of which there are as many kinds as there are methods of gynæcological examination. I do not think that such modes of treatment are likely to find favour in this country. How far a licensed abuse of this practice might be carried we need not discuss. How far the possible advantages would be overbalanced by the certain evils it is not difficult to surmise. No, we have had enough of internal massage in the shape of unwarrantable, unnecessary, and unduly prolonged medical examinations, to desire to invest, with the professional sanction of such an association as this, a new tribe of uterine and vaginal manipulators.

I know nothing, personally, of the value of this form of massage in metritis, ovarian tumour, parametritis, perimetritis, cystitis and uterine tumours. It is not probable that I shall ever resort to it in such cases. Not having tried its efficacy, I do not wish to criticise *the results* of those who have. Still, I cannot help thinking, for a variety of reasons, both as regards operator and patient, that the time might have been more beneficially spent in trying other therapeutic or operative measures.

It would seem superfluous to speak of the dangers attending the use of external massage in parametritis, and the risks of an uncertainty of diagnosis in these affections, or to the situation and character of effusions, but in works on massage its employment is advised by various authorities in these conditions. One thing appears certain, that the responsibility

of administering it in acute pelvic cellular or peritoneal inflammations should rest with no one save a qualified medical manipulator. Even in cases of chronic lymph, or serous exudations in the pelvis, I maintain no nurse should be entrusted with the administration of massage, and no one should advise it save a physician, and one well versed in such diseases.

I have known patients who were "rubbed" while suffering from fibroid tumour and ovarian cyst. The kinetic energy here might have been better expended on the lady's boots. Not long since I had a patient with contracted vulvar orifice, lupoid degeneration of the vaginal wall, and uterine hæmorrhage. She consulted me for the hæmorrhage. This was stopped after a little time, and I left. The next I heard of her was that she was being rubbed. A lady friend recommended it, and a doctor sent the masseuse. She was being "cured." The last I heard of her was that she was dangerously ill, and under the care of the doctor who sent the masseuse. I have reason to believe that at the time he never locally examined the case. Now this is the abuse of massage—the vulgar empiricism that I complain of.

A word on the Weir-Mitchell plan. I do not deny its efficacy. I have had too many proofs of this in cases of my own to do so. I do, however, mean emphatically to give it as my opinion that discrimination and care are required, both in recommending it and carrying it out. I do not dispute that it is a lucrative method of treatment to the overseeing physician, more especially if he can bargain for half the large honorarium beforehand—*R.M.D.* But to fatten women up, and especially young girls, somewhat as a Bey of Morocco would do, in subdued light, and on the flesh of ortolons, only substituting the æsthetic surroundings of a West End bedroom or boudoir for the seraglio, milk diet for the food of the luscious bird, and massage for a species of "lomi-lomi," is not always so permanently conducive to health of mind and body as we are led to believe. In one particular case I am cognisant of, such a course was attended by disastrous mental results—the patient narrowly escaped a lunatic asylum.

You can no more separate mind and body, says Professor Bain, than you can bisect a man's intelligence. The enforced stuffing and isolation entailed in this modern method of making blood and fat—though after all, as I have hinted, not so very modern—are hardly the therapeutic means to blindly bargain about beforehand, as one would for a trip in a P. and O. steamer to Suez and back. I say that while such isolation and mechanical management may answer in a certain proportion of cases (it is a matter of simple common sense, call it, with Professor Huxley, "common ignorance," if you will), that it cannot but be followed by injurious results in others, while in many the improvement, at best, is but of a transitory character. Let me, however, cite, in proof of the benefit of the Weir-Mitchell system, the outlines of one remarkable case. A young lady, of highly neurotic temperament, consulted me for œsophageal and spasmodic stricture; she suffered from dysmenorrhœa, and there was a slight degree of retroversion. She was greatly reduced. The retroversion was restored. Still the difficulty of swallowing continued, notwithstanding active local treatment, œsophageal galvanism internally and externally, the passage of the bougie, and various remedies in the shape of nerve tonics, bromides, &c. However, ultimately she recovered sufficiently to enjoy food and revert to her ordinary duties. Some months subsequently she returned worse than ever. She was greatly emaciated, and could with difficulty swallow even a teaspoonful of fluid; the swallowing of any liquid was attended by a loud gurgling. An atonic state of the muscular fibres resulted in a pouch-like dilatation of the gullet, in which liquid collected, and from which they regurgitated. The skin was dusky and the face pinched. Altogether, her state was most wretched. Still, I could pass, with a little difficulty, a large œsophageal bougie into the stomach. Suffice it to say that with a six weeks' course of Weir-Mitchell's plan, combined with massage of the neck muscles, and external galvanism, this patient was perfectly, and I believe permanently, restored to health. She was isolated from friends for a period of about five weeks.

I will conclude with a summary of one instructive case: About four years since, a young lady, accomplished and well-educated, injured herself in playing tennis. She was examined under chloroform and a large ring pessary inserted. This was after a time removed, but not before it had caused vaginitis and some metritis. This was followed by various neurotic troubles, inability to walk, agonising ovarian pain, loss of flesh, general nervousness. Another consultation ended in the verdict of "shortening of round ligaments." She came a long distance to London to me, in order, as she wrote beforehand, to have this done. I could find no necessity for the curtailment of the round ligaments; there were the remains of the metritis, some slight retroversion, intense vaginal irritation, catamenial irregularity and scantiness, some left Fallopian fulness and ovarian congestion. She was under my care for some time, and underwent a prolonged course of massage, and modified Weir-Mitchell regimen; the progress was slow. Gradually she recovered. Her circumstances were rather straitened—she wanted employment. Having intelligently watched the excellent masseuse, who operated on her, for a considerable time, with my approval she determined to learn massage. She did so, got instruction, studied for herself, and is now a very successful masseuse. Needless to say, her round ligaments were not shortened.

I crave your pardon for the length of this communication, the importance of the subject is my excuse. No one can stand before you a more complete proof of the benefit of massage than the writer of this paper, whose shoulder joints were so crippled after rheumatism some eight years since, that his college gown had to be drawn over his shoulders, before lecture, for two sessions, yet who, after all remedies had failed, by the aid of massage, the Turkish bath and galvanism, has twice since then rowed the Thames from above Oxford to Hammersmith.

On the motion of Dr. BANTOCK, the discussion of this important paper was adjourned until the next meeting.

REVIEWS.

Grundriss der Gynäkologischen Operationen.

By VON M. HOFMEIER : Leipzig und Wien, 1888.

This work may be assumed to represent fairly the actual state of gynæcological surgery in Germany. Hofmeier, now professor at Giessen, was a pupil of Schroeder of Berlin. Every page may be said to reflect the spirit and practice of the master. To the memory of Schroeder it is reverently dedicated. He quotes freely from Hegar and Kaltenbach, and Billroth and Luecke. English, American and French authors receive but scant attention. The references to the literature are frequently open to the objection that they are wanting in precision. Dates are commonly omitted.

The book opens fitly with a description of the "gynæcological instrumentarium." The dorsal posture of the patient so much insisted upon by the German school requires the special table to begin with. The opening illustration is a picture of a woman fixed for examination and operation. Admitting that this posture has distinct advantages, it has not on that account exclusive advantages. Many indications are far better fulfilled by adopting the lateral posture. Antiseptic measures are insisted upon with a minuteness which will appear extravagant in this country.

To begin with, Koch's sterilisation oven is used to disinfect instruments. Filtered water is preferred to aseptic solutions. The disinfection of the operator and assistants is the first point. This must be thorough. The hands and arms, the nails must be subjected to "energetic mechanical cleansing." A special instrument is figured for trimming the nails. The skin of the hands and arms must be scrubbed with a hard

brush and alkaline soap for at least three minutes. Reference is made to a special memoir, "How shall the doctor disinfect his hands?" Scrubbing must be followed by a washing with a solution of sublimate. Great care must be taken that his clothing and linen be free from infectious germs; and he should wear a freshly washed linen or rubber over-all. Nor must the operator's beard and hair be forgotten. The cleansing of these demands special care. Then comes the preparation of the patient and the "field of operation." As the external genitals, with their many folds and strongly secreting glands, and the hair form a gathering ground for micro-organisms of every kind, so does the vagina in yet more marked degree. Energetic cleansing of the mucous membrane is to be done with special attention. Even if these organisms are not for the most part of pathogenic nature, their presence is often enough by suppuration, decomposition of secretions, &c., to prevent primary union in plastic operations. But direct pathogenic organisms may be in the vagina, and in spite of every outward antiseptic precaution may set up, by direct inoculation of the wounds, serious diseases.

The "energetic cleansing of this mucous membrane therefore demands especial care." This is not always easy. It is in no way sufficient to use cleansing baths and disinfecting irrigations of the vagina. Mucous membranes possess, especially in pathological conditions, such extraordinary cysts, furrows, and depressions, that the injected fluid cannot thoroughly penetrate them. Besides, the folds of the external genitals are often covered with a fatty secretion, and the walls of the vagina and cervix are so coated with tenacious mucus, that the mechanical action of the running water fails to wash the walls clean, or hardly removes the superficial layers of epidermis. And certainly this is necessary. We are not satisfied, in the case of operations on the surface of the body, with simply washing the parts. We cleanse the skin freely first with ether and then with soap, in order to effect the radical removal of the superficial epithelial layer. Much more, then, does it seem necessary (and still more rigorously in obstetric cases) to effect such a cleansing where it is proved

that we have to do with a true gathering ground of infectious germs of every kind. It is, therefore, absolutely necessary thoroughly to soap and brush the external genitals and the vagina, before irrigating them with disinfecting fluids. For this purpose we use small and hard brushes, with which the external genitals and the vagina are energetically scrubbed with soap, and then follow the irrigation and rubbing with a 3 to 5 per cent. solution of carbolic acid. The result of this is most convincingly found in that the mortality of total extirpations of the uterus and the vagina, which was for the first forty-eight cases twelve deaths, was for the succeeding thirty cases *nil*. In like manner, under the proper conditions, the cervix and cavity of the uterus must be treated in operations on these parts. The cervix must be brought into the speculum by a hook or forceps, and the mucous membrane then rubbed with a stem armed with wool steeped in the disinfecting fluid. When there is purulent or decomposing stuff in the uterus, we place sticks of iodoform with cacao butter, or irrigate freely with emulsions of iodoform in glycerine. In many cases it is necessary first to bring away the noxious parts by the sharp spoon.

The above rules, our author says, may be enough in the case of ordinary operations, but when we come to laparotomy, more is required. It would occupy too much space to give even a condensed account of what is enjoined. But in addition to the rules laid down for ordinary operations, the operator, having previously taken a cleansing warm bath, puts on fresh-washed clothes. The patient also takes warm baths repeatedly, and the folds about the navel and external genitals are washed, and the pubes shaven.

When all this, and even more that we are compelled to omit, has been scrupulously done, we are permitted to begin the operation. It is clear that the preparations must be begun early, or the day will hardly be long enough to get through with the operation. The author properly insists upon quickness in operating, so as to minimise the risk of infection from floating germs. And after all, there is one source of danger overlooked : the emanations from the operator's person. His

breath may be foul, and we have seen perspiration dripping from a surgeon into the patient's peritoneum! Brown-Séguard has shown that the poison of the human breath is a chemical compound, and that microbes are not in it. The first might be met by the operator's wearing a disinfecting respirator—a mask would be better—and after all, the ubiquitous microbe may creep in. The spray may meet this; but in England the spray is now given up, and the results are better.

It may be freely admitted that no pains, no time can be misspent if they contribute to the safety of the patient. But it may be confidently affirmed that results certainly not inferior to those obtained in Germany are the rule in this country, under the strict rules of cleanliness. And surely scrubbing away the surface of the vaginal mucous membrane is not only superfluous, but is a sin against physiology. The glands, which are such a terror to Hofmeier, fulfil useful functions, one of which is to supply a protecting medium, and another is elimination. Scrubbing, again, is apt to make a traumatic surface, and thus to cause the very danger against which it is practised.

We have dwelt at so great length upon this part of the book, because we thought it desirable to present a fair picture of German bacteriophobic gynæcology. Little room is left to discuss the operations themselves. There is not much that is new to our readers. Exception, perhaps, must be made in favour of the plan of removing portions of the skin of the labia minora in cases of obstinate pruritus.

The description and appreciation of "Emmet's operation" is fair. The account of "Inversion" is unsatisfactory. Like that of Schultze, noticed in our last number, it is strikingly behind the point reached in this country. There is no recognition of the value of sustained elastic pressure in reducing the uterus, and, as a necessary consequence, he has to fall back upon the deplorable refuge of amputation.

There is a rather full account of "Castration." This he defines, in contradistinction from ovariectomy, as the removal of ovaries not necessarily diseased, in order, through the arrest

of ovulation and menstruation, to bring about direct or indirect effects. Here, strangely enough, the author attributes a quasi-priority to Hegar over Battey. He cites a case of Hegar in July, and one of Battey in August, 1872. Now, in Hegar's case the ovaries were diseased, whilst in Battey's they were healthy; Hegar's case died, Battey's recovered. Whatever honour attaches to the origination of this operation, it is surely due to Battey.

Removal of the ovaries on account of displacement, including hernia, is briefly referred to.

The subject of ectopic gestation is well discussed. He thinks that all extra-uterine gestations during the later months should be considered apart from tubal gestations of the first months. The question how to act when, towards the end of gestation, the child is still living, is not yet settled. He is in favour of laparotomy in cases of ascites from tubercular and other diseases.

Upon the whole the book is well written. Although it cannot be said to contain much that is original, it gives an interesting picture of the actual state of surgical gynaecology in Germany.

The Anatomy of Labour, including that of full-time Pregnancy and the first parts of the Puerperium, exhibited in Frozen Sections reproduced ad naturam. By A. H. F. BARBOUR, M.A., B.Sc., M.D., F.R.C.P.E., F.R.S.E., Lecturer on Midwifery and Diseases of Women, School of Medicine, Edinburgh; Assistant Physician for Diseases of Women to the Royal Infirmary. Eleven plates, with description. Edinburgh and London, W. and A. K. Johnston, 1889.

These beautiful plates comprise life-size, and as nearly as possible *ad naturam*, representations of the frozen sections which Dr. Barbour has made from the first stage of labour and after delivery. To these are added some spirit-hardened sections of uteri removed by Porris's operation, which show the relations of the placenta on the uterine wall. He has also

reproduced, on a reduced scale, all the sections which he had published up to the end of 1887.

The frozen sections speak for themselves. To make the plates more useful, Dr. Barbour has, in addition to the usual plan of naming structures, given a *précis* of the facts which each section teaches ; so in studying this atlas the reader may be so far independent of the Hand-book of the Anatomy of Labour, which was primarily intended as the text for this atlas, but is now published in a separate form.*

The plates are perfectly executed, and should be in the hands of every teacher of midwifery.

The Causes and Treatment of Abortion. By ROBERT REID RENTOUL, M.D., with an Introduction by LAWSON TAIT. Two coloured plates and thirty-five engravings. Edinburgh, Young J. Pentland, 1889.

For a number of years the author has devoted a considerable amount of time and study to the causes and treatment of abortion. He more especially acknowledges his indebtedness to the writings of Barnes, Duncan, Martin, Parvin, Tait and Winckel. The work deals in order with the maternal causes, the foetal causes, the paternal causes of abortion. The section following discusses criminal abortion, or foeticide. This is followed by a chapter on abortion in plants and animals. Chapters viii. and ix. contain a description of the symptoms, diagnosis and prognosis of abortion. Chapter x. discusses the complications and sequelæ of abortion and their treatment. In chapter xi. the treatment of abortion is exhaustively gone into. There is a copious list of works and authors referred to. Altogether the work is a complete digest of what is known and taught on the subject.

* The Anatomy of Labour as studied in Frozen Sections, and its bearing on Clinical Work. Edinburgh, W. and A. K. Johnston, 1889.

SUMMARY OF GYNÆCOLOGY, INCLUDING OBSTETRICS.

ANNALI DI OSTETRICIA E GINECOLOGIA.

Dr. Angelo M. Romeo describes a series of experiments on rabbits and bitches, in which he studied the question "Is the placenta a real filter or not?" He concludes: (1) That the placenta, in physiological conditions, is an insurmountable barrier to the passage of all figured elements (such as carmine or Chinese ink), which may be circulating in the maternal blood, or to put it better, the placenta is a real filter. (2) That if these elements accumulating in the sinuses and lacunæ of the placenta have the power to provoke either an inflammation, or a lesion destructive to the walls of the villi, then the physiological barrier is overcome, and the said elements pass from the maternal circulation into the foetal, transmitting to the foetus any infection which may be contained in the figured elements. (3) When these figured elements contain pathological organisms and have not the power to injure the placental tissues, their passage from the maternal to the foetal circulation does not take place, and the foetus remains exempt from the disease affecting the mother.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF CHICAGO.

Regular meeting Friday, December, 21st, 1888, the President, CHARLES T. PARKES, M.D., in the Chair.

Dr. W. W. JAGGARD showed the uterus, adnexa, kidneys and ureters recently removed from the body of a IIpara that had died of eclampsia twelve hours after delivery. The specimens had been placed at his disposal through the courtesy of

Dr. Fred. Jenner Hodges, of the resident staff of Cook County Hospital. The patient entered the hospital a few days before confinement; albuminuria was noted. The course of labour was normal; the first convulsion occurred after delivery.

Dr. JAGGARD wished to direct the attention of the Fellows to the characters of the cervix uteri that he thought were in full harmony with the views of Bandl. He begged to make a complete report at the February meeting, when it was proposed to discuss the subject of puerperal eclampsia.

Dr. C. T. PARKES: Did I understand you to say that the theory is that the neck becomes continuous with the uterine cavity, and the tissue of the neck of the same thickness as the uterine walls, so that they can scarcely be distinguished from each other?

Dr. JAGGARD: Yes.

Dr. PARKES: I should say that this specimen rather demonstrates the fact that the cervix maintains its integrity. This agrees with the impression I received and stated to the Society, in the case of Cesarian section that was presented by Dr. Etheridge. When that uterus was exposed to view during the Cesarian section, the mark of the differentiation between the neck and the body was positive and clear. I called attention to it at the time; it struck me as being peculiar. From these two specimens I should be inclined to favour Stoltz's opinion, which is that the cervix persists in an intact state throughout pregnancy.

Dr. HENRY T. BYFORD presented a vaginal ovariectomy trocar. This instrument is designed to supply a want I have felt in the removal of ovarian cysts through the vagina. It is practically a curved canula with a little shield and stopper on the end which directs the fluid into a vessel. When the recto-uterine cul-de-sac of the peritoneum is opened, the tumour is held by a hook, while the slightly sharpened end is thrust into it. If the fluid be thick, the stopper may be taken out.

Ureteral Calculus.

I hold in my hand a renal or ureteral calculus, which I knew to be in the lower end of the ureter for several months. The interesting part of it is that there seems to be an end broken off, and that end is easily felt there now by the finger in the vagina. I can get it between my fingers bimanually, and hope in time to thus work it down into the bladder.

Dr. PARKES: I think it is a separate calculus; that looks like a facet.

Dr. BYFORD: Probably; although it looks as if the remaining one was originally a part of this one. It breaks and crumbles easily.

Cysto-Fibroma of the Ovary.

The microscopic examination made by Dr. Frank Cary proves this to be a fibro-cystic tumour of the ovary. It was the size of an adult head, and very irregular in shape. The cysts, which made up about three-quarters of its volume, are clustered about an irregular white glistening fibrous mass at the pedicle. The cyst walls are thick and fibrous near the centre, but become membranous at the circumference. That the pedicle became twisted some months before the operation seemed probable from the symptoms, and is testified to by this large blood clot in the largest cyst, by the dark colour of the cystic wall and coagulated fluid, and by the extensive inflammatory adhesion or fusion of the omentum with this portion of the tumour. The uterus has also undergone fibroid degeneration, and is the size and shape of a pine-apple. I left the uterus and removed the other ovary, which was somewhat large and vascular. I operated October 22nd at the Women's Hospital, and discharged the patient, apparently strong and well, four weeks later. She was forty years old, unmarried, had had symptoms of the tumour for fifteen years, such as incessant backache and pain in the abdomen. The menstruation was regular, and, contrary to what might have been expected, the flow was scanty.

Ovarian Pregnancy.

I have also brought some specimens from the practice of Dr. William H. Byford. It appears to be a case of ovarian pregnancy in which the sac was intact and developed down between the layers of the broad ligament. The tube was entirely separate from the sac, and on the opposite side of the ovary. The foetus was macerated, and, although it formed a beautiful specimen at the time, has partly fallen to pieces. There was a small cyst in the other ovary, which you will find on the same platter.

The history is as follows :

Mrs. B., Idaho, American, age thirty-four, wife, married sixteen years. One miscarriage fifteen years ago. One child fourteen years of age. Entered hospital May 19th, 1888.

Seven years ago, after an illness of several weeks, during which time she was confined in bed, and suffered much pain, she passed a fleshy substance, pronounced by attending physicians to be a false conception. Since that time, about every two years she has had periods of flowing for days or weeks at a time. Health between these periods as good as usual. About one year ago she missed two menstrual periods; was then taken sick, had severe hæmorrhage from uterus, and was confined to bed for two or three weeks. Since then until she entered hospital, has menstruated every two or three weeks, and flowed profusely at such periods.

Diagnosis, granular endometritis, lacerated cervix, small fibroid tumour in posterior wall of uterus, enlarged ovaries. Was curetted a few days after entering hospital. Trachelorrhaphy was performed about four weeks later. Operation a success. Seeming much improved, in July she was discharged. At St. Paul, on her way home, began to flow again, and returned to hospital. Fld. ext. ergot was given in twenty-drop doses four times daily. August 1st she was again curetted, but did not receive much benefit from this operation. The ovaries were removed November 12th. Smooth recovery.

Fatty Tumour of the supra-renal Capsule.

The specimen I now wish to describe is a supposed fatty tumour of the supra-renal capsule, but it was unfortunately allowed to spoil and cannot be exhibited.

Mrs. Silva Walker, Pataha, W. T.; age 38; American. Married twenty years; has had five children, eldest 19, youngest 10. No miscarriages.

One year and a half ago first noticed increase in size of abdomen in right side and through pelvis. Slight backache. Size increased very rapidly the last six months. Menstruation regular and normal.

She was operated on November 25th, 1888, and is getting well. This, I believe, is the only fatty tumour of the supra-renal capsule which I can find on record that has been removed before death. A few have been discovered at autopsies. It weighed twenty pounds. As it filled the abdomen so completely, even pressing down the uterus, its place of origin was not determined before the operation. A feature of importance in the case was the manner in which the growth was removed. It was enucleated from the capsule, and the capsule sewed with catgut and trimmed so as to make a canal from the bed of the tumour up to the external abdominal walls. The edges of this canal or sac were sewed into the abdominal wound so as to shut off the abdominal cavity; the bed of the tumour was thus treated extra-peritoneally. The kidney was removed. Whether it might have been safely left or not is a debateable question; the chances were it would have undergone inflammatory changes. Its vessels were ligatured, and the ligatures left in the capsule. A large exposed vein, at the bottom of the cavity, was clamped with hemostatic forceps, and a large bleeding surface, on the under aspect of the diaphragm about the normal attachment of the supra-renal capsule, was gathered together in the blades of two long hemostatic forceps. The forceps were taken off at the end of thirty hours. The patient has done very well since. The tissues, which were caught in the bite of the forceps, have sloughed out, and the cavity is

healing. The other kidney secretes twenty to forty ounces of normal urine a day.

Dr. ETHERIDGE : How long was the external incision ?

Dr. BYFORD : From a short distance above the pubes to a little below the ensiform cartilage. It was not measured.

Dr. PARKES : How did you come to settle definitely that this tumour grew from the supra-renal capsule—why not from the post-peritoneal fat for a basis ?

Dr. BYFORD : The supra-renal capsule was not found, but this tumour was attached to the under surface of the diaphragm where the suprarenal capsule usually is. The tumour now developed above and over the anterior surface of the kidney and did not lift the kidney forward, but rather held it back in place. There was no indication of unusual fatty development in any of the tissues about. The firmness of the capsule and its relations after enucleation favoured my view. A post-peritoneal fatty tumour about the kidney would have more lateral attachment, and, I think, develop more down the side into the iliac fossa ; whereas this one, which was freely movable, pressed down in the centre of the pelvis so as to give the impression at first that it was attached to the uterus. All these facts have led me to consider the supra-renal capsule as the starting point.

Cysto-fibro-myoma of the Uterus.

The last specimen I have to show is a fibro-cystic tumour of the uterus weighing thirty pounds. It was surrounded by forty-five pints of ascitic fluid, so that the patient was relieved of seventy-five pounds of weight at the operation. What was left of her weighed about ninety pounds. On the right side is a plain fibroid growth ; on the left side it has undergone myxomatous degeneration. A peculiarity is that the uterine cavity is completely obliterated half an inch below the normal sized fundus by the tumour, and begins again lower down. The patient was about forty-four years old and menstruated scantily. The tumour, which is known to have been growing

over fifteen years, started below the fundus in the posterior uterine wall. The broad ligaments were ligated separately, and the uterine stump treated extra-peritoneally. This is the sixth day since the operation. There has been but little reaction, the drainage tube is about dry, the patient is hungry, and has commenced to direct the household affairs. Flatus passed freely from the beginning. Formerly, when I was an adherent of the intra-peritoneal method of treating the stump, I stood in great awe of abdominal hysterectomy for fibroids, but since adopting the extra-peritoneal method I find that the mortality is but little greater than after ovariectomy.

I would like to say, in this connection, that I have been found fault with for failing to bring microscopic slides of my specimens, or reports of pathologists upon three cases of alveolar sarcoma of the uterus, reported at the September meeting of this Society, and that my diagnosis was called in question. In my anxiety to take up as little of your valuable time as possible, I suppose that I must have omitted to state that, in the two cases shown, specimens were obtained by curettement a week before I removed the uteri, and were examined by pathologists—that from Mrs. M. by Dr. L. L. McArthur, that from Mrs. Sh. by Dr. M. J. Mergler. In the case referred to, in which the uterus went to pieces during removal, Dr. Doering, who was the family physician, had the specimen examined by a pathologist. The fourth case I casually mentioned was diagnosed by Dr. McArthur from specimens I obtained by curetting. In the case of sarcoma of the ovary, Dr. Bayard Holmes was my authority.

The PRESIDENT: I have had under my control lately a large tumour of the abdomen. I decided that it was behind the intestine, because there was one channel passing over the surface of the tumour, in which one could get a gurgling sound, and something that resembled the displacement of gas. That indicated that the intestine was in front, and so it proved. It was a pancreatic cyst.

Dr. W. W. JAGGARD: The Society is to be congratulated upon the presentation of so much valuable pathological

material at this particular meeting. I have been specially interested in the case of ovarian pregnancy. Without for one moment questioning the accuracy of Dr. William H. Byford's diagnosis, I beg to remind the Fellows that cases of ovarian pregnancy are very rare. Werth has demonstrated the tubal origin of many of the cases recorded as ovarian. As an essential criterium of ovarian pregnancy, the possibility of the participation of the corresponding tube in the sac must be excluded. In the specimen, as it has been presented to-night, it is impossible to exclude the participation of the tube in the sac.

The PRESIDENT: I remember seeing a few years ago, in the office of Dr. Murphy, of St. Paul, a specimen of a uterus and both ovaries removed after death. In one ovary there was a foetus. The Fallopian tube and all were present.

Dr. W. W. JAGGARD read the following note, entitled—

Two Observations of Typhoid Fever during Pregnancy.

I report the two following examples of typhoid fever during pregnancy, both on account of the intrinsic interest of the case, as well as to bring out the experience of others with this complication. Typhoid fever is of very frequent occurrence in Chicago, and the Fellows that have resided in the city for a considerable period can doubtless supply important facts that bear upon the reciprocal relations of this disease and pregnancy.

This note may be regarded as in a measure supplemental to the excellent discussion of typhoid fever, recently held before the Chicago Medical Society, at the suggestion of its President, and our distinguished Fellow, Dr. J. H. Etheridge.

Observation No. 1.—This case was observed and described by my friend, Dr. William M. Findley, of Altoona, Pa.

Mrs. M. H. Y., aged twenty-four years, Irish extraction, whose husband had been ill some six weeks with typhoid fever, was, after the initial prodromata, taken down with well-marked typhoid fever, May 7th, 1873. Temperature and pulse ranging high in evening, with epistaxis, and diarrhoea early. The case would not have attracted unusual attention

except for the fact that she was pregnant and her labour was anticipated on the 10th May, 1873. She, however, was not taken in labour until the 15th May. On the evening of the 14th May, I was called about 9 p.m., after my regular visits for the day, and found her condition as follows:—Temperature 103°, pulse 140, respirations 36, with marked bronchial irritation and secretion—having had six characteristic stools during the day in spite of remedies—and the contractions of the uterus quite strong and regular, os dilated to a half-dollar piece size and dilating. The heart being very feeble, and jactitation marked, with exhaustion coming on rapidly, I gave her, *ad libitum*, best port wine and brandy, so that in the four or five hours of labour she took a quart of brandy, and about as much more port wine, with no other effect than to keep her in the same condition as I had left her before labour came on. In due time the labour was terminated, contraction was perfect once the product of conception was expelled completely, and no untoward results followed. Although during the labour her bowels were moved copiously some six or eight times, after labour the bowel trouble seemed to subside greatly, and she passed on to convalescence in some three weeks without marked irregularities, as in an ordinary case of uncomplicated typhoid fever. The secretion of milk was entirely suppressed, the mammary glands never showing any signs of activity during her illness.

The condition of the child, however, was remarkable. The entire cuticle or epidermis was shrivelled and creased as though it had been macerated in hot water, and in a day or two it was covered with bullous spots from head to foot, vesicular first, then pustular. As the boy was healthy in other respects, in the course of a week or ten days the eruption under emollients was well, and the cuticle becoming detached, was replaced by healthy skin tissue and the baby was well, except that as a young man he carries the cicatrices of some of the bullæ.

Observation No. 2.—This case came under my own observation. From the history of the case, written by Dr. B. L. Riese, I make the following extracts :

Mrs. A. McG., twenty-three years old, married June 17th, 1888. Last menstruation June 10th, 1888. Morning sickness six weeks after marriage. Husband and wife taken sick with typhoid fever about the 28th of August; both admitted to Mercy Hospital, September 4th. Husband died a few days later of a malignant type of the disease. In the case of the wife, the disease pursued a typical course, lasting about three weeks; maximum temperature, 103.4° F; maximum pulse, 130. October 1st, several days after the subsidence of the fever, severe pains referred to the hypogastric region, hæmorrhage from the vagina. After irrigation of the vagina, indagation revealed the vaginal portion softened and the ovum presenting through the cervical canal. Plan of treatment, expectant, in the absence of serious hæmorrhage or symptoms of sepsis. October 3rd, escape of liquor amnii; on examination, foetus protruding through the os externum; removal of the foetus, placenta, and membranes by bimanual manipulation under aseptic conditions.

The patient made an uninterrupted recovery. The ovum corresponded to the fourteenth week. (Presented for inspection.) The apparent cause of abortion in this case was hæmorrhage into the decidua serotina and placenta fetalis. The extravasation occurred before the removal of the product of conception. This fact is evident from the characters of the clot, as large as an English walnut, and firmly embedded within the placental tissue. The presence of hæmorrhagic endometritis may be inferred from the character of the decidua vera and chorion læve.

With reference to the mutually unfavorable relations of typhoid fever and pregnancy, experience teaches that pregnancy confers upon the individual no immunity from typhoid fever. Upon the other hand, the course of this disease is commonly modified unfavourably, and the fever in turn exercises a distinctly prejudicial influence upon the course of gestation. The tendency to the interruption of pregnancy is more marked than in any of the acute infectious diseases, with the possible exceptions of small-pox and cholera. In

about two-thirds of the cases collected by Kaminski, Zülzer, Scanzoni, and others, pregnancy was prematurely interrupted.

The chief causes of abortion or premature labour are to be found :

1. In the elevation of maternal temperature causing death of the fœtus by insolation, or its premature expulsion by thermic irritation of the uterine musculature.

2. In the almost constant hæmorrhagic endometritis, illustrated in the specimen presented.

3. In the depression of the maternal blood-pressure with asphyxiation of the child.

4. Until within a recent period the transmission of the infection through the placenta from the mother to the child has been regarded as possible, but not demonstrable. Lately, however, Widai and Chautemesse have detected the bacillus, alleged to be characteristic of typhoid fever, in the blood of a fœtus corresponding to the fourth month.

The unfavourable influence of pregnancy upon typhoid fever lies specially in the tendency to abortion or premature labour, at a time when the loss of blood and the muscular exertion necessary to effect the expulsion of the product of conception may precipitate the lethal issue from exhaustion. There is also increased risk of perforation.

Dr. E. J. DOERING: I would like to have Dr. Jaggard tell us whether or no there are any statistics by American authors. I have had two cases, one last September, in which the fever lasted from three to four weeks, and in both of which pregnancy was not interrupted. One lady was in the sixth month of pregnancy, the other in the seventh month. The temperature in either did not exceed $104\frac{1}{2}^{\circ}$ F. It is my experience that these cases are liable to go through without interruption. Before the discussion is closed, it seems to me it would be well to have the experience of members present. They must have seen such cases, and I do not think we should let the subject go by without all the members stating their experience. In my last case I expected daily that the

patient would miscarry, but to my surprise she went right along. That was quite a severe case. In the other case the fever did not go quite so high, but the last case was typical, and lasted fully four weeks. I not only thought she would miscarry, but had grave doubts as to her recovery. But to my surprise and pleasure she passed through safely, and returned to her own home in Mobile some months later.

The PRESIDENT: If my recollection serves me, I am satisfied I have seen several cases of pregnancy complicated with typhoid fever, and I am quite sure that every one of them miscarried where the pregnancy was early; those in which the typhoid fever came on towards the later stages of pregnancy, the patient not only miscarried, but lost her life as well. Of course I cannot now recall the exact number, nor the cases, but that is the recollection I have. It seems to me I have often heard doctors say that it is rather an impression among medical men, that if they have a case of typhoid fever in pregnancy it is likely to be followed by a miscarriage.

Dr. JOHN BARTLETT: I recollect but one case. That was many years ago, in which a woman pregnant about four months, and in the third week of typhoid fever, doing quite well, was taken in abortion. She went through the process of labour satisfactorily, but died the next day.

Dr. BAYARD HOLMES: The transmission of the bacillus of typhoid fever through the placenta is a matter worthy of consideration. We know that in certain cases of anthrax the foetus is not infected, although the mother's blood is full of the bacilli. After the birth of the living, healthy foetus at term, a sufficient period follows for the incubation of the disease, and then appears anthrax; first in the umbilicus, then general symptoms of anthrax septicæmia. In other cases, however, the foetus is infected with the anthrax in utero. In a paper that I presented to this Society some month ago, I held that the pyogenic infection of the foetus through the placenta was a comparatively rare occurrence. Since that time I have paid considerable attention to that subject, and I conclude that my statement should be limited. All cases in

which infection of the foetus in utero has or has not taken place can be reconciled. In cases of sapremia with the presence of multiple known bacteria in the blood of the mother, those bacteria are all included in phagocytes. These phagocytes are sufficiently powerful to prevent the multiplication of the microbes, although they are not able to destroy them. This accounts for those typical cases of Bollinger, in which the foetus was not infected, although the blood in different parts of the body of the mother sheep contained the anthrax bacillus. Whenever, on the other hand, the sapremia has advanced to the condition of septicæmia, and the phagocytes have been overcome, and multiplication of the bacteria takes place at their expense, then embolism occurs in the peripheral arteries, that is to say, in the uterine wall, and the multiplication of the microbe follows at that point in close proximity to the foetal circulation. In this way they force themselves onward into the capillaries of the placenta, and the foetus is infected. In relapsing fever, and all cases of septicæmia, the infection of the foetus is the rule. Typhoid is a form of septicæmia, at least in the latter part of the first week. The symptoms of septicæmia are then present, viz., capillary embolism in the skin forming hæmorrhagic spots, the characteristic rose spots of typhoid; ptomaine poisoning, which either raises or lowers the temperature; internal capillary embolism resulting in splenitis, pneumonitis, hepatitis, nephritis, and in cases of a pregnant patient, hæmorrhage in the distended capillaries of the decidua in close proximity to the placenta. At first it is simply a miliary hæmorrhage, but as the destruction of the capillary wall increases by coagulation necrosis, a considerable quantity of blood escapes between the placenta and the uterine wall, and contractions of the uterus are initiated which ultimately expel the contents of the womb.

The case which Dr. Jaggard reports from Pennsylvania seems to me to be one of acute pemphigus (Demme), and due to a secondary mixed infection of the mother, and not directly to the typhoid disease. Pemphigus is a relatively frequent

form of secondary infection in children, but in the adult its manifestations are so trivial that a diagnosis is difficult. On this account the mother who was primarily infected seemed to escape, while the non-resisting child suffered the terrible disfigurement of the disease

Dr. JAGGARD, in closing the discussion, said he was unable to find in the literature of the subject any statistics from American sources that related to the items touched on in his communication.

The rôle that elevation of maternal temperature plays in the causation of death of the foetus depends chiefly upon the rapidity with which the rise occurs, and the duration of the pyrexia. As pointed out by Doléris, Doré, Max Runge, and others, if the elevation of maternal temperature occurs slowly, and if it be of brief duration, the foetus commonly escapes injury.

DEUTSCHE MEDICAL WOCHENSCHRIFT.

Ingluvin in the Vomiting of Pregnancy.

Dr. Popp reports considerable success with ingluvin in the vomiting of pregnancy. Having a very obstinate case, upon which he had exhausted all other resources, he administered three times daily, one half-hour before meal-time, 8 grains of ingluvin, and immediately afterward 2 tablespoonfuls of 1 per cent. hydrochloric acid solution. An improvement was observed after a few doses had been taken, and cure was effected after the treatment had been continued for three weeks.

TRANSACTIONS PHILADELPHIA OBSTETRIC SOCIETY.

Massage for Uterine Fixation. By Dr. WM. GOODELL.

I believe that massage of the fixed womb can be employed with propriety and without the indecency alleged by some. He had, with Dr. Taylor, treated a case in which a pelvic

inflammation had been set up by treatment at the hands of an irregular practitioner. She almost died, but finally recovered, with the roof of her pelvis feeling like a hard board. The womb was enlarged and absolutely immovable. She had menorrhagia and constant pain. He began treatment by application of a mixture of carbolic acid, iodine and chloral and by using uterine massage. In doing this one simply passes one or two fingers behind the womb and catching it from above with the other hand, rocks it from side to side and backwards and forwards, stretching the adhesions and separating them if possible. Dr. Taylor administered electricity locally. To-day she is in rude health.

N. C. MEDICAL JOURNAL.

Aphorisms in Aseptic and Antiseptic Gynæcology.

By J. T. MERRIWETHER.

Bacteria require a certain amount of water to develop, and if we can keep our wound surfaces dry, we keep it aseptic.

The country doctor can always practise aseptic and antiseptic gynæcology as easily as his city brother who is always near his base of supplies.

The gynæcologist should always carry either a solution of the bichloride of mercury, or the antiseptic tablets, which are perfectly reliable and are made by several good houses; carbolic acid, iodoform, gauze cotton, bandages, nail brush and soap.

A convenient way of carrying the bichloride is to make a solution of 3 j to 3 j of alcohol; of this 3 j in a pint of water makes a 1-1000 solution; or you may carry $7\frac{1}{2}$ grains of the salt and $2\frac{1}{2}$ grains of sodium chloride in a capsule; dissolving one in a pint of water also giving a 1-1000 solution.

A more condensed way of carrying it is to make a solution of 1 1-12 grains of the bichloride in 2 minims of glycerine, with the addition of $\frac{1}{4}$ grain of sodium chloride. This represents about 1 grain of the sublimate to 2 minims of solution, a

small part being thrown down as calomel. Of this 15 drops to the pint make a 1-1000 solution.

The bichloride in an acid solution is more efficient as an antiseptic than in a neutral or alkaline one, and therefore it is well to add 5 parts of hydrochloric or tartaric acid to each 1000 parts of the solution. This also prevents, to some extent, the decomposition of the sublimate, and prevents the formation of the albuminate of mercury, an inert chemical, when brought into contact with the albumen of blood or serum.

Carbolic acid should be in pure crystals, of which 3 vi to the pint of water makes a 5 per cent. solution. A little more elegant preparation, and one which has no effect on polished steel, and at the same time is devoid of the odour and caustic properties of pure carbolic acid, is a mixture of 1 part carbolic acid crystals and 3 parts powdered camphor. A 20 per cent. solution of this has the same germicidal properties as a 5 per cent. carbolic acid.

Iodoform may be carried in a tin pepper box fitted with a lid to prevent spilling.

A solution of equal parts of pot. iodide and the biniodide of mercury, 1 to 4000 strength, is a most valuable antiseptic, being efficient, and can be applied to the skin in a 5 per cent. solution without causing any irritation.

Instruments should be of the best steel, welded in one piece, or else the handles should be baked on, and instruments of more than one piece, such as forceps, &c., should be provided with patent locks, so we may take them apart and wash and cleanse every crack and crevice; they should be highly polished, preferably nickel-plated, except the cutting edge. The handles should be smooth, with no rough places or notches for the lodgment of dirt and septic matter.

Dressings may be bought in the shape of iodoform and bichloride gauze, &c., but they are not satisfactory unless bought and used fresh; and then, they may be made cheaper at home. To prepare the bichloride gauze, take 1 part of sublimate, 2 parts common salt, and 500 parts water; the gauze is made of cheese cloth, boiled in water with a little soda

until the grease is taken out. Soak this gauze in the above solution for an hour, and then wring out and partially dry. Put it in a glass jar, air-tight, keeping end slightly moist, and it will stay in a good condition for several months. Iodoform gauze is made by mixing 3 iii of powdered iodoform with 3 vi of castile soap suds, making an emulsion; rub this into 2½ yards of gauze, this making a 10 per cent. gauze, which is sufficient; while for a 25 per cent. gauze use 3 vii of iodoform.

The best mode of rendering instruments and dressings sterile is heat. If the instruments are placed in a pan of water and the water brought up to the boiling point and kept there for ten minutes, bacteria are killed and the growth of even the spores is much retarded. To insure boiling of all the water, the pan should be covered. This is probably the best and most practicable method of rendering instruments aseptic. They should be boiled both before and after an operation. When this is not convenient, a carbolic acid solution of 5 per cent. strength should be used for instruments, it being less corrosive than the bichloride, and does not dull the scissors much. The camphorated carbolic acid is also efficient.

Tannin wool is an excellent styptic and antiseptic. To make it, add to distilled water pure tannin until saturated, stirring all the time; then add cotton wool until all the solution is taken up; put into an evaporating jar and dry, and then keep it in a closed jar. Before using it should be teased out. It may be iodized by adding an ethereal solution of iodine, 1 grain to 3 ii, allowing the ether to evaporate.

Sponges should be cleansed by washing them thoroughly with green soap and a 1-1000 bichloride solution. Take new sponges which are freed from sand by beating, and soak them in a 1-1000 solution of potassium permanganate for twenty-four hours. Then, after washing out the permanganate with warm water, immerse them in the following solution until they whiten, but no longer: Take of sodium sulphite 1 part, 1-5 part of a watery solution of either hydrochloric or oxalic acid of a strength 8 parts to 100, and of water 100 parts. Taking

them out of this, they should be thoroughly washed in clean running water, and then kept in a carbolic acid 1-20 or bichloride 1-1000 solution in a close jar until used. Cleaning sponges with a 1-5 solution of sulphurous acid in water after an operation renders them perfectly white, so you may detect any clots or detritus which may have become enmeshed. A sponge which will sometimes come handy is made by taking balls of absorbent cotton of convenient size and tying around them mosquito netting. These, soaked in a 1-20 carbolic acid, or 1-1000 bichloride solution, or boiled for ten minutes, are practically aseptic. Half-a-dozen or more should be kept on hand, and being so cheap, should only be used once.

Sutures and ligatures may either be silk, gut, silver or tendon, and should have been rendered aseptic in a 1-20 carbolic acid or 1-1000 bichloride solution, or, in the case of gut, in oil of juniper; or else they should be soaked or dipped into boiling water for a minute or two just before using.

The hands should be thoroughly washed with a nail brush and soap, preferably one of the antiseptic soaps, of which the biniodide of mercury is the best. Particular attention should be paid to the nails, cleansing the subungueal space thoroughly: A 5 per cent. solution of carbolic acid is rather too irritating to use on the hands, and so the following method is recommended: After using the brush and soap, immerse the hands in 80 per cent. alcohol, which removes the oily layer always on the epidermis. By then rinsing them in a 1-1000 bichloride or 1-35 carbolic acid solution, preferably the former, perfect asepsis may be obtained. Instead of the alcohol, ether, iodoform or turpentine may be used.

Drains may be of rubber, glass, horse-hair or gut. Bone drains are not safe, as there is some danger of infecting the wound. If certain as to their aseptic condition they may be used, as they are rapidly absorbed, and so require no removal. For draining cavities, particularly the abdominal, long glass drains should be used, reaching to the bottom of the cavity. By twisting a piece of bichloride or iodoform gauze into a rope and passing it to the bottom of the tube, the other end

being lost in the dressing externally, we syphon, as it were, all liquids left behind and exudates. These ropes may be changed, when necessary, without disturbing the tube. The effusion can also be removed by drawing it up with a small syringe, fitted with a piece of rubber tubing—this tubing is passed through the drain to the bottom of the cavity.

In an emergency case, common lamp-wicking, impregnated with iodoform, may be used as a drain, particularly when the secretions are small.

Drainage tubes should be removed within sixteen to twenty-four hours, unless contra-indicated, as their presence prevents primary union, and there is some danger of infection from them.

All aseptic effusions are absorbed spontaneously, and are often of use to the system ; and aseptic clots usually become organized and transformed into a solid cicatrix.

During the operation the wound should be frequently douched with a 1-2000 or 1-3000 bichloride solution or a 1-50 carbolic acid, and the operator should now and then, particularly before inserting a finger or hand into the wound, dip his hand into the same solution.

After the sutures have been properly adjusted and cut, the incision should be dusted with iodoform or boracic acid, as much for their absorbent as for their antiseptic properties.

Bichloride or iodoform gauze should be used with profusion in dressing wounds, in order that the discharges may be perfectly absorbed and disinfected, and that ingress of air may be prevented.

In emergency cases, bismuth, freshly roasted and ground coffee, finely pulverized ; sawdust medicated with the bichloride or carbolic acid ; filter or blotting paper, soaked in a 2 per cent. solution of bichloride, may be used as dressings, Salol, salicylic acid and hydrate of chloral, 2 grains to 3 i, make excellent antiseptic fluids when nothing else can be obtained.

Turpentine, something always on hand, can be used as an antiseptic by soaking the dressings in it. It prevents the flow of serum and acts as an antiseptic in that way.

Varick's method of applying heat is good. After the operation apply heat in the form of cloths wrung out of boiling water to the wound surfaces. This coagulates the albumen and practically forms an impermeable dressing itself. The water must be boiling and close at hand, as merely hot water does no good. After the application the sutures may be adjusted as wished.

Peroxide of hydrogen in deep fissures is an excellent antiseptic, oxidising pus upon contact.

Where union by first intention is desired, the dressing should not be removed until the seventh to the tenth day, unless special indications arise, when, if you have observed proper care, you may expect to find union and everything in a sweet, clean and aseptic condition. In many cases the first dressing is all that is required.

After operations upon cavities it is well to wash them out with either a 5 per cent. solution of common salt or clean, recently boiled water, to remove any excess of bichloride. In cases in which we have no antiseptics at hand, these will answer for douching, irrigation, &c.

Before making an examination the gynæcologist should cleanse his hands as though he was going into an operation. A carbolized vaseline or one of the following ointments are to be preferred as lubricants to lard or commercial vaseline: Vaseline, 30 parts, boric acid, 4 parts; vaseline, 120 parts, biniodide of mercury, 1 part; vaseline, 30 parts, iodoform, finely pulverized, iodol, salol or salicylic acid, 4 parts; vaseline, 30 parts, creosote, 1 part; olive oil, 100 parts, carbolic acid, 10 parts. Either of these make good antiseptic lubricants.

The vagina should always be wiped out previous to examination with a wad of cotton soaked in a carbolic acid solution, and before an operation should be irrigated with the same fluid.

After operation the vagina should be irrigated thoroughly and the wound surfaces dusted with iodoform; then an antiseptic tampon should be introduced to absorb the discharges but should be removed early.

Boro-glyceride, 20 to 50 per cent., is an efficient antiseptic, and for use on tampons is to be preferred to anything.

In gonorrhœa in women, cleanse the vagina and vulva with a 1-10,000 bichloride solution, and then rub the mucous membrane with a pledget of cotton soaked in a 1-100 solution of the same. This is to remove the superficial layer of epithelium which contains the gonococcus. Dust the vagina and vulva with iodoform and pack the vagina with iodoform gauze. This gauze is to be removed every four or five days, and the vagina irrigated with a 1-2000 bichloride solution and the gauze renewed. After the third or fourth removal the gauze is omitted and the vagina irrigated every day for two weeks with the bichloride solution. This must be thoroughly done to succeed.—*Archives of Gynæcology*, March, 1889.

BRITISH MEDICAL JOURNAL

Antero-Posterior Compression Forceps for Application at the Brim of Flat Pelves. By SAMUEL SLOAN, M.D.

These forceps are not presented as an improvement on the classical long pelvic curved forceps. With many modifications to suit many tastes, these latter serve their purpose admirably; and, until recently, when these instruments failed in simple cases of obstruction at the brim, whether in flat or in generally contracted pelves, I believed that the only alternative to them was craniotomy; turning being reserved for special cases.

I shall not here enter into the question of turning or craniotomy as an alternative to forceps at the brim, in cases of flat pelves. I am justified in believing that the views I have already expressed are now generally accepted by the profession; since, in two and a half years, no attempt, so far as I know, has been made to controvert them.

What I am now submitting to your criticism is a new instrument designed to take the place of craniotomy, where the

other forceps have failed, in a large number of cases of obstruction at the brim. It is known that in flat pelves the head of the child, which as a rule lies in the transverse diameter of the pelvis, or nearly so, and in an extended position, may, according to the relation of the pelvis to that individual head, pass in various ways, each having its own mechanism. In my experience the same head may pass through the same brim with varying mechanism, according to the position the head is placed in, or is allowed to take naturally above the brim. The most satisfactory mechanism, and the one most favourable for the ordinary forceps, is that of simple flexion of the head in the transverse diameter of the pelvis, rotation following immediately after, as the head is then in the cavity of the pelvis.

The position of the head which renders the ordinary forceps a peculiarly unsuitable instrument, is where it lies well above the brim, and with the anterior parietal bone overhanging the pubes. Here the well-known tendency of the ordinary forceps to cause flexion and rotation of the head comes into play too soon ; that is, before the head has even become engaged in the brim. Under such circumstances the difficulty is really increased by the forceps, and the more the traction the more the difficulty. Delivery is, in these cases, utterly impossible with such instruments ; and version, as I have elsewhere shown, is unsuitable. To meet these difficulties, and thus in some cases be able to avoid the horrible operation of craniotomy, in which not only is the woman exposed to increased danger, but an innocent babe is deliberately killed—this is the object of these new forceps ; and, since they are never to be used until craniotomy is the only resource left, it follows that every child born alive with these instruments is one life saved, without any increased danger to the other.

These instruments are first compressors and then tractors. Now it is obvious that theoretically an instrument which is able to compress the head in the proper direction is preferable to one which only or mainly acts by traction in the cases

we are considering, for naturally the head must undergo compression ; but, without compressing instruments, that must be done at the expense of the maternal soft parts.

The first difficulty, however, is how to manage this without taking up so much room in the already diminished diameter of the pelvis as will more than make up for any reduction made in the bulk of the head, and the measure in which I have succeeded in doing this must be the measure of the success of the instrument. This difficulty is so real a one, especially considering the strength of blades required, that probably it has deterred others from trying it ; for any instruments apparently designed to lie in the antero-posterior diameter above the brim are really meant to lie in the oblique or transverse, like the ordinary forceps. These have blades of the usual length, so as to be able to grasp the head in the occipital-malar direction ; whereas antero-posterior compression forceps must have short blades so as to grasp the head vertically.

The first method which suggested itself was to make the blades very narrow, and apply them in the lateral conjugate of that side of the pelvis in which the bi-parietal diameter lay. This, however, I soon found was impracticable, as there was no room in the side of the cavity for the instrument to work. I next tried the blades so wide that the rims lay in each of the lateral conjugates. This kept the instrument in the middle of the cavity ; and, by permitting the promontory to completely pass through the fenestrum of the posterior blade, removed entirely the difficulty of finding room for it. The great width of the anterior blade served to protect the bladder from pressure ; but I found that fully an eighth of an inch of the anterior pole of the diminished diameter was lost by this width of blade, the head during extraction having this space between it and the pubes. By altering the transverse curve, however, of this blade, so as to make it coincide with the anterior curve of the pelvic brim, even this loss of space was rendered unnecessary, little more than the thickness of the rims requiring to come off, and this not actually in the

diminished diameter. The transverse curve of the posterior blade I have made a segment of a large circle with its convexity forward, so as to permit the head during compression to pass backward into the space on either side of the promontory. Another difficulty which early presented itself was that the frontal portion of the head being much narrower than the bi-parietal portion, the blades must be able to lie flat over this wedge-shaped surface. This, however, was easily managed by making the lock unusually loose, permitting so much rotation of the handles on their long axes as to make the distance between the blades at the two sides differ by fully two-eighths of an inch.

Before venturing to introduce these new instruments into the pelvis of a living woman I used them and compared their action with the ordinary forceps perhaps more than a hundred times with dried pelves and foetal heads either fresh or preserved in spirits and water. When I speak of the ordinary forceps in these experiments I refer to those with which I am most familiar—Simpson's. In these trials I found in some cases both instruments equally successful, whilst in some instances the Simpson forceps had the advantage, and in some others the new instruments succeeded where the ordinary forceps failed. The result in these cases depended somewhat on how the head happened to be placed above the brim. It may be worth while detailing a few of these experiments, noting that, in many of them, these new instruments were at the time in an incomplete form, and had some disadvantages which they are now free from.

1. Placing a premature foetal head above the brim of a flat pelvis with a conjugate diameter of two inches and a half, the new forceps with moderate traction drew the head through the pelvis without any appreciable indentation of the head by the promontory. Whilst the outer edges of the anterior blade were pressing on the brim of the pelvis, the inner edges of the same blade were about an eighth of an inch from the anterior surface of the pelvis, thus preventing the head from quite reaching the pubes by about this distance.

Applying Simpson's forceps to the same head, at the brim of the same pelvis, it was found that they could only lie in the transverse diameter, an attempt to force them even slightly into the left oblique diameter being prevented by the pressure of the posterior part of the left blade against the ala of the sacrum, and of the anterior edge of the right blade against the right pubic bone about an inch from the symphysis.

On grasping the head by the forceps when placed in the transverse diameter, the head was found to descend posteriorly, being deeply marked by the promontory, whilst the anterior part of the head bulged over the pelvic brim, and no amount of traction could bring it through. Any attempt to direct the head backward into the hollow of the sacrum by the forceps was ineffectual, on account of the forceps blades only rotating backward on their tips as a centre of rotation, the blades having no grip of the head.

The new forceps had grasped the head in the most favourable position; the tip of each blade lay below each ear, the occipital rims of the blades lay over the parietal eminences, and the frontal rims lay anterior to the coronal suture; the forceps had thus complete control of the movement of the head. When Simpson's forceps were applied, the face was in the right blade, the tip of which reached beyond the chin; the left blade inclosed the occiput and its tip pressed deeply into the neck. The pendulum movement was found to be a great assistance to the passage of the head with the new forceps. Although the posterior parietal bone was flattened with the forceps, there was in no sense an indentation of that bone. After many trials, resulting in complete compression and softening, the head was found to pass more easily by pushing from above or by Simpson's forceps, when the head was placed exactly in the brim, than with the new forceps.

2. With a soft premature head placed in an extended position over the brim of a simple flat pelvis, having a conjugate of two inches and a quarter, Simpson's forceps caused

an increased projection of the posterior part of the anterior parietal bone over the horizontal ramus of the pubes, on account of slight rotation of the head following traction, and there was no descent of the head. The compression forceps flattened and brought the head through easily, with marked flattening of the posterior side of the head, but with no indentation of the bone.

3. Generally contracted, artificially-flattened pelvis, with mature but compressible head, antero-posterior diameter of pelvis being three inches and one-eighth; head passed (1) with very slight hand-pressure; (2) easily with Simpson's forceps; (3) less easily with the compression forceps, the blades of which seemed to occupy too much room.

4. Simple flat pelvis, antero-posterior diameter two and one-half inches, the soft mature head lying decidedly above the brim. Simpson's forceps, when head extended, caused bulging of the anterior parietal bone over the ramus of the pubes, which bulging increased as traction was increased, and as slight rotation occurred. Not only was no attempt made by the head to enter the brim, but increased traction seemed to cause increased bulging, and no descent took place. The compression forceps, under the same conditions, at once flattened and drew down the head till the base of the skull had reached the level of the plane of the brim. No further progress was, however, made till the anterior blade had been removed, when slight traction forward and downward with the posterior blade completed delivery. Head reintroduced after having been thus flattened and Simpson's forceps applied, the more traction the more bulging, and no attempt at descent occurred.

As a rule, the more the head lay above the brim, the more were the compressing instruments successful, whilst the more the head was through the brim at the beginning of the experiment, the less successful were the new instruments. Sometimes the compressing forceps would draw the head through the brim, but so completely was it then locked that no pendulum movement was possible. If, however, the

anterior blade was then withdrawn, the head could be pushed through from above with very slight pressure. In these circumstances it was usually necessary to leave the posterior blade attached, since its withdrawal was found to be impossible without endangering the soft parts over the promontory and also the ear of the child. Should such a difficulty occur in actual practice, I should first endeavour by abdominal pressure to complete delivery; failing this, an attempt might be made to pass the ordinary forceps with the handle of the impacted blade held well back against the coccyx. If delivery were still impossible, craniotomy would be required.

I have spent so long a time endeavouring to perfect the instruments before risking their application to actual cases of obstructed labour, that I have only had four opportunities of doing so. The first occurred in the hospital. It was a case of generally-contracted pelvis, the true conjugate being about three inches, and the head lay in the transverse diameter. Barnes's forceps were applied, but they failed to deliver. Before resorting to craniotomy I applied my own instruments. The application was easy, but not succeeding to extract with slight traction, I desisted, and craniotomy had to be performed. The child weighed eight and one-quarter pounds. The woman ultimately made a good recovery, although there was dribbling of urine for two or three weeks after confinement.

The second case was also a hospital one. The woman had had two previous children, both delivered by myself. Her first labour was terminated by the forceps, and the child was stillborn. At the second pregnancy labour was induced about the end of the eighth month, when I delivered her of a living child by Barnes's forceps. At this second confinement it was discovered that the flattening of the pelvis was apparently increasing, the intercrystal measurement having been this time nine inches and a half instead of ten; whilst the interspinous was on each occasion ten inches. At the third labour, which was also induced, the head was found to lie in

the third position, and flexed. Barnes's forceps, which ought to have delivered such a case easily if the disproportion were not too great, failed to effect delivery after fourteen minutes' traction, and, as the instruments slipped twice during this time, it was decided to try the axis-traction forceps of Professor A. R. Simpson. It was found by two of us, however, utterly impossible to introduce the upper blade, apparently on account of the strength and abrupt pelvic curve of the blade. My compression forceps were next tried. At the end of eleven minutes the head was lower, but, as it had not cleared the brim, it was decided at once to perforate. So great was the obstruction, however, that the head had to be twice perforated, and it took thirty-seven minutes to complete the extraction. The woman was dismissed well on the thirteenth day.

The third case occurred in the out-door department of the hospital, and was under the care of Dr. John Ritchie, one of the hospital staff. The pelvis was a flat one, and the woman had had six previous confinements—four girls delivered alive by forceps, one girl stillborn without instruments, one boy delivered by craniotomy. At this, the seventh labour, Dr. Ritchie tried Simpson's forceps for one hour, and then sent for me. As the instruments had slipped under his use, and had already been tried for one hour, I did not reapply them but at once inserted my own. In fifteen minutes the head was at the outlet, and the labour was completed by the straight forceps. The child, a boy, made only one or two efforts at respiration, though the heart beat for fifteen minutes. The head was not indented, and the woman made a good recovery.

The fourth case was a fifth confinement. Of the other four children, one was born dead with, and another was born dead without, instruments. At the fourth labour craniotomy was performed by myself, after repeated efforts to deliver by the forceps. On this, the fifth occasion, I found the pelvis to be a flat one, with a true conjugate of about three and one-half inches. The head lay above the brim in the first position, but extended, and with some dipping of the front portion.

I applied Simpson's forceps, whilst Dr. Dunlop kept up firm abdominal pressure; the patient being in the dorsal position. Though the lock remained loose and the handles were kept well back, the blades repeatedly slipped, and as the head had made no advance at the end of half an hour, I felt it was quite useless to try them longer. As the child was still alive I introduced my compression forceps. In one minute the head passed into the pelvic cavity with a jerk. Soon it was at the vulva; when I removed the blades and pushed the head out by pressure on the distended perineum, the whole operation occupying only three minutes. The child, a large boy, cried at once vigorously: the head, which was unusually firm, had only slight surface markings, and mother and child did well.

*A case of Hernia of Parturient Uterus through the
Linea Alba.*

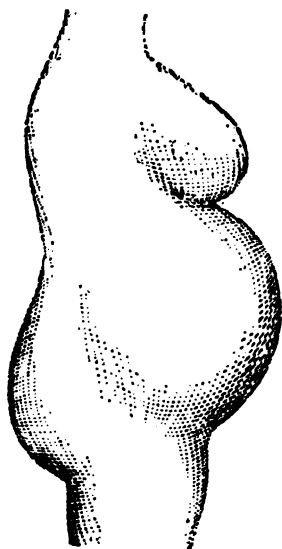
By CHARLES E. HAGNER, M.D.

In July, 1884, I delivered a primipara, Mrs. Blank (after a prolonged labour), of a full term female child. Forceps were used with slight laceration of the perineum, which was immediately stitched up and healed perfectly. She made a good recovery, and showed no signs of ventral hernia.

In March, 1886, Mrs. B. was delivered of a second full-term female infant without forceps, the perineum remaining intact, the labour being a short one (six hours), and perfectly normal. Within three months patient called my attention to a "lump" about the umbilicus. Upon examination I found an umbilical intestinal hernia, about the size of an egg, which was readily reduced, the opening being large enough to permit the introduction of the end of the finger. An abdominal truss was ordered which retained it perfectly. The patient wore this until she was taken in labour with her third child, in February, 1888.

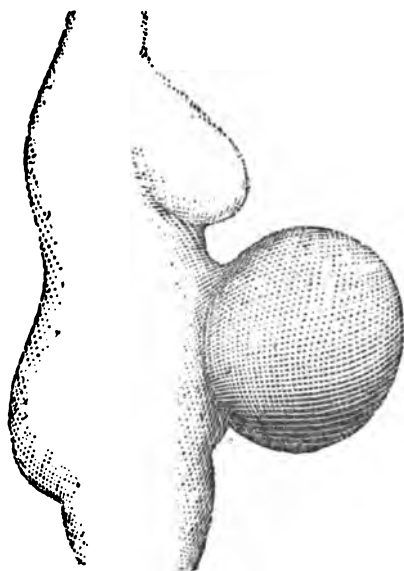
On February 8th, 1888, at 10 A.M., I was called to see Mrs. B., and found her in the first stage of labour, os dilating and pains frequent. I remained an hour, when, everything pro-

gressing normally, I left her for an hour and a half. Upon my return found the bag of waters ruptured, patient in bed and in active labour ; os fully dilated, head engaging L. O. A. The labour progressed normally and actively for about an hour and a half, examinations being made from time to time. Suddenly the patient, after a very violent pain, called out and said : " Oh, doctor, I am tired out, I can no longer bear down." It had been about ten minutes since my last examination. On approaching the bed, I observed that the abdominal tumour, heretofore perfectly normal, presented a peculiar



appearance, being much more prominent, and seeming to project at right angles to the patient's body, she lying on her back. Upon lifting the sheet, I was startled to find that the uterus had left the abdominal cavity, and was covered only by the skin, which was very tightly stretched, and seemed as thin as tissue paper. The uterine vessels were clearly seen, also the contractions, when a pain came on. The head at this time was in the vagina, and I immediately saw that the

woman was correct in saying that she could make no expulsive effort. Notwithstanding the uterine contractions, which were regular, and strong and visible, the head making no advance, and the patient becoming exhausted, I immediately applied the forceps and delivered the child. There was no difficulty in applying the forceps, as the head was well down, but the impossibility to restore the uterus to its normal position, and its tendency to fall to one side or the other, made it necessary to have the nurse support it in the median line until the child was extracted. It proved to be another fine healthy girl. The placenta was quickly extracted by the hand, as the patient seemed exhausted, and I was most anxious to terminate the labour.



As soon as the placenta was removed there was little trouble in replacing the uterus through the opening in the walls of the abdomen, it having thoroughly contracted and reached its proper size. A suitable bandage was applied, and the woman made a good recovery. It is surprising to find

how small an opening there seems to be in the abdominal wall at present; the lady was in my office to-day; she is wearing the abdominal bandage she wore before her last pregnancy, and says she suffers no inconvenience. I had not seen her before for several months, and sent for her so that I could report her present condition.

THERAPEUTIC GAZETTE.

The Use of Antipyrin in Obstetrics.

By Drs. AUVARD AND LEFEBVRE.

From a paper published in the *Bulletin Général de Thérapeutics*, the following conclusions are drawn :

1. In certain impressionable women the administration of antipyrin during labour appears to produce considerable reduction in suffering; but this is nearly always very transient, and it is doubtful whether it is the action of the drug or the suggestion resulting from the hypodermic injection.

2. In the majority of cases the action of antipyrin is entirely negative.

3. Without denying the good results which may be exceptionally produced through the use of this remedy, its action in reducing the pains of labour in this case should be regarded as thoroughly inconstant, and by no means to be compared with chloroform or chloral in obstetrical doses.

Precocious Marriages and their Sequelæ.

In the *Annales de Gynécologie*, March, 1889, Dr. Jules Rouvier gives the result of his observations at Beyrouth, Syria, on early marriages. In some cases marriage took place as long as twenty-four months before the first menstrual epoch. In others from the ages of eleven to fifteen. Dr. Rouvier draws the following conclusions: (1) Absolute fecundity is diminished. (In the East families are generally very numerous, and frauds in marriage very rare.) (2) The

proportion of abortions is increased. (3) Premature sexual relations and the work of parturition favour the appearance of inflammation of the uterus as well as displacements and contortions of that organ.

A Plea for Operative or Rapid Dilatation of the Cervix Uteri.

In the *Montreal Medical Journal*, March, 1889, Dr. T. Johnson Alloway condemns the use of tents and says :

It is not my intention to describe precisely the operation of rapid dilatation of the cervical canal by means of the steel dilator, but I *do* wish to speak of the great advantage of the operation over the gradual or tenting method. To perform rapid dilatation it is necessary to see the operation done, there are so many important details in connection with it. The patient should be profoundly under ether. The instruments which give the best satisfaction are Sims' glove-stick dilator and the Ellinger-Goodell serrated dilator. These instruments can be thoroughly boiled and otherwise prepared before using. The vagina is washed out with soap and warm water, and then irrigated with 1-1000 sublimate. The operation can be combined with that of incision to any degree the operator determines upon. My experience has led me to think that the combination is a good method, better probably than simple dilatation as practised by Goodell. I have now performed the combined dilatation and incision operation so often, and under varied conditions of the pelvic organs, without having had an interruption in recovery, that I feel convinced the operation should have absolutely no mortality.

This short report is not intended as an essay upon dilatation of the cervix uteri, but as a warning and protest against the use of the dangerous tent. Before closing, however, I must not forget also to protest against the half-hearted sort of tampering with steel dilators, so often adopted in office practice, before making uterine applications of caustics. This practice is most iniquitous, and more cases of pelvic inflammation have followed it than has been credited with. The

vagina in such cases cannot be properly cleansed, the uterine tissues are resisting without anæsthesia, and any lacerations made are direct inlets of infection to the lymph spaces and vessels. Put your patient thoroughly under ether, conduct the procedure as you would a laparotomy, and avoid tampering with patients' lives to suit a little personal convenience on your part.

CORRESPONDENCE.

To the Editor of the British Gynaecological Journal.

DEAR DR. FANCOURT BARNES,—Discussing longevity in women the other day with you, and good memories, you will be interested, probably, to hear that yesterday I talked to a lady—a Mrs. T——, who lives close to me, about events in the year 1813 and a little later. This lady was residing in Brussels before the outbreak of the war between Russia and France, and she remembers hearing her father say that it “would be the ruin of Bonaparte.” She recollects seeing Bonaparte drive into Brussels, Marie Louise seated beside him; his hand was resting on Marie Louise’s knee, and she turned to her father and said, “What a rude man he is to put his hand on a lady’s knee!” Bonaparte, she says, was very fond of Brussels as a residence, and stayed at his palace—Montaigne de la Cour—during his visits there.

In 1815, in Brussels, there were monthly subscription dances held, and it was one of these which became famous as the celebrated ball before the action of Quatre Bras. She says the dances were held in the Rue de la Madeleine, in a suite of apartments over, she thinks, a coach-builder’s, or some class of shop of that kind: there were several rooms *en suite*, but they were low ceilinged and not specially spacious. The balls were very “elegant” and were attended by “the quality.” During the earlier months of 1815 Brussels became so filled with troops, from all quarters, that her father sent her over to England: thus she was not actually present at the celebrated ball, though her husband was, and had to run off in his white tights to change his uniform. The streets were so full of troops, she says, particularly Cossacks—though I am in doubt as to whether Cossacks were there before Waterloo—that no women were allowed out after 7 p.m., or at any rate were cautioned against doing so afterwards when Bonaparte was a prisoner of war. She rowed round the “Bellerophon” in Plymouth Sound, and saw him with his cocked hat on, walking up and down the deck.

I think this is a fair specimen of memory, and I do not think there are many living to-day who could beat this record.

I am, dear Dr. Barnes,

Yours very truly,

PRESCOTT ROBERTS.

Ealing, February 23, 1889.

NOTES.

DR. ARTHUR W. EDIS has been compelled to resign the office of Obstetric Physician to the Chelsea Hospital for Women, through increased pressure from private engagements.

THE publication of the *Gazette de Gynécologie* has been suspended for the present, owing to the illness of the Editor, Dr. Paul Ménierè.

EXTRACT from the *Bulletin Municipal Officiel*, 31st March, 1889 :
"Préfecture de la Seine. Second Report on the Service of Disinfection at the Cattle Market of La Villette—Disinfectants. By a letter dated 5th July, 1888, the Préfecture de la Seine addressed a request to the Minister of Agriculture to consult the Committee of Enquiry into Infection, on the most efficacious preparations for neutralising the morbid germs of different diseases which animals might contract. Pending the reply of the minister, important modifications have been made in the products for the disinfection of the Cattle Market. Carbolic acid, as employed by the Sanitary Service of the Cattle Market, from 1st May to 1st July, 1888, was incapable of easy dilution; it left the ground greasy and gave rise to complaint that it made it dangerous for the animals to move about. It also made dark stains upon the pavement, and owing to the impossibility of making a perfect mixture of the carbolic acid with water, it produced a very irregular distribution, which, under certain circumstances, might prove dangerous to the animals. Its odour prevented its employment in the stables, and it was only used in the passages and selling sheds. This disinfectant has been replaced by cresyl (Jeye's fluid). Whilst carbolic acid gives out a permanent odour which may perhaps dominate and mask other odours which it may be desired to destroy,

cresyl carries away the odour which it is desired to dissipate, and in two hours after its use no odour whatever is left, that of the cresyl itself disappearing with that which it is called upon to combat."

THE following are the officers of the Section of Obstetric Medicine and Gynæcology at the Leeds Meeting of the British Medical Association, on Tuesday, Wednesday, Thursday and Friday, August 13th, 14th, 15th and 16th, 1889:—*President*, Charles J. Cullingworth, M.D.; *Vice-Presidents*, James Braithwaite, M.D., J. W. Byers, M.D.; *Hon. Secretaries*, F. Hall, M.D., St. Mark's House, Leeds; Peter Horrocks, M.D., 9, St. Thomas Street, S.E.

THE International Congress in Therapeutics and Materia Medica will be held at Paris from the 1st to the 5th August, at the rooms of the "Sociétés Savantes," 28, Rue Serpente. Any medical man can take part in the proceedings on payment of the sum of ten francs. The officers are M. Moutard Martin, *President*; Dujardin-Beaumetry, *Vice-President*; Constantin Paul, *General Secretary*. Among the subjects down for discussion are:—"Antiseptics appropriate to each variety of microbe." "Cardiac tonics." "Unification of weights and measures," and "The utility of an international pharmacopœia." Persons wishing to exhibit drugs and interesting specimens should write to Dr. Blondel, Hôpital Cochin, Paris.

THE BRITISH GYNÆCOLOGICAL JOURNAL

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AUGUST, 1889.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MARCH 27, 1889.

ARTHUR V. MACAN, M.B., PRESIDENT, IN THE CHAIR.

PRESENT : 24 Fellows, 3 Visitors.

The following was elected a Fellow of the Society :—Dr. G. T. Cattell. The following were proposed for election :—Richard Douglas, M.D., Nashville Tennessee, U.S.A. ; Alexander Thomas Scott, M.R.C.S., 8, Parkhurst Road, London, N.; James Leslie Callaghan, L.R.C.S., Colyton, Axminster.

Dr. BANTOCK showed two specimens of cirrhosis of the ovaries which he had removed from a single woman aged forty, on February 6th. The patient had, for many years, undergone a great variety of treatment without any relief to the severe and almost constant pain from which she suffered. In consequence of the oozing from the torn adhesions he had to use a drainage tube, and unfortunately he met with that accident which is the most frequent in the use of this instrument, for a piece of omentum got into it. When first detected on the second day he turned the tube round, but failed to dislodge it. On the next day he had to take out the tube and substitute another. This, of course, produced considerable disturbance of the parts, and the result was the formation of

a fistulous track, which, however, in due course healed up. It was satisfactory to be able to say that the symptoms for which the operation was performed were completely relieved.

Dr. Bantock then exhibiting a sea-tangle tent with a well-marked constriction at the side of the internal os, said it was well known that some gynæcologists of repute denied the existence of such a condition. The patient in question was a young married lady who, on account of severe dysmenorrhœa, had had her cervix divided September, 1886. About a week afterwards a glass stem was introduced, but had to be removed very speedily. Some five months later she had an attack of what was called peritonitis (pelvic). When she first came under his notice, eight months ago, the uterus was exceedingly tender, and retroverted; the left ovary was enlarged and prolapsed, and their mobility was impaired. The question of the removal of the appendages, even if urged, would not have been entertained, and he could only adopt a pessary (Albert Smith's), and prescribe rest. The result of this treatment was undoubted relief except of the dysmenorrhœa, and when she returned a few weeks ago he felt assured of the existence of some constriction. As the uterus occupied a nearly normal position, and the left ovary had greatly diminished in size and tenderness, he thought it advisable to attempt something more for the relief of the dysmenorrhœa. Accordingly he proceeded to dilate the canal with graduated bougies, but finding the obstruction too great to be overcome by such means within a reasonable time, he determined to ascertain the condition more accurately, and for the purpose also of hastening the process, he introduced a tangle tent. At the end of twenty-four hours the tent would not move, and at the end of forty-eight hours it was removed with some difficulty. A glance at the instrument must satisfy the most sceptical as to the existence of a well-marked constriction at the site of the internal os. He thought it might interest the Society to see the proof of what he had for years contended for. He was unable to recall more than one case in an experience of many years in which dysmenorrhœa could be

attributed to constriction of the external os, and he confidently affirmed that when dysmenorrhœa was due to a condition of the uterus itself it was much more likely that that condition would be found at the internal than the external os. He was happy to add that the tent had not set up any local or constitutional disturbance.

The PRESIDENT said it was a very interesting case, but he would have liked to have been told the exact symptoms. Dr. Bantock had merely said that the chief symptom was constant and severe pain.

Dr. GRIGG referred to a case in which he had used a sea-tangle tent, and in which he had found it almost impossible to remove it, and he had to call in Dr. Bantock to remove it. He had kept the tent *in memoriam*, as nothing had ever given him so much trouble.

Dr. ROUTH said he had met with similar difficulties in the use of the sea-tangle tent, and he had been able to remove the tent only after great difficulty. The question was what were they to do in these cases of eternal stenosis. Some years ago incision of the internal os came to be a fashionable operation. Stem pessaries were then in vogue, but unfortunately two or three deaths occurred from their use, and that brought them into disrepute. Lately he had found the effect of electricity most marked in the removal of those obstructions. If they used the negative current it was indisputable that the whole uterus became dilated, so much so that one or two fingers could be introduced into it. The advantage of the negative pole was that while the positive pole led to contraction the effect of the negative pole was lasting. He said he had never seen any bad results from the use of electricity.

Dr. MACNAUGHTON JONES said that his individual experience was that the sea-tangle tent sometimes led to dangerous results. Once, after placing the tent in position and leaving the patient for a few hours, he found her in a state of collapse, and she presented a most alarming appearance. Since then he had been very cautious, and had never

left a sea-tangle tent for more than ten or twelve hours. He preferred to remove the tent and replace it by another. Wherever practicable, he thought that forcible dilatation was preferable. He thought the tupelo tent was better than the sea-tangle. It dilated more uniformly, and did not cause the same irritation. He said he knew of nothing in their practice in which they were so completely at sea as in finding out the cause of dysmenorrhœa. It occurred with contraction of the internal os and without it, and there was considerable doubt whether the internal os was the cause of dysmenorrhœa. He had seen cases in which the internal os had been dilated without any relief; sometimes the cause was in the ovary, and sometimes in the uterus. For his own part, he had begun to doubt as to the part played by stenosis in the production of dysmenorrhœa.

Dr. EDIS mentioned a case in which a sea-tangle tent had been left in for thirty-six hours, and had to be removed with forceps by the aid of a speculum. That, too, was not the whole of the difficulty, for the patient had an attack of peritonitis. He said that in those cases the whole difficulty was in the diagnosis. There were few cases in which the dysmenorrhœa was due to the condition of the internal os. There were so many and various conditions, and it was very rarely they met with a case really simple, and if dilatation would remove the cause of suffering he thought there was nothing like the sound, beginning with the smaller sizes to prevent irritation, and leading up to No. 9 and 10. He much preferred the tent to more violent means of dilatation; by the latter method they were liable to tear the tissues, and were consequently more likely to get septic troubles.

Mr. LAWSON TAIT said there was no force half so severe as the tangle tent. If they adopted the safe method of elastic pressure they could do it with a pound and a-half pressure.

Dr. FANCOURT BARNES said he was surprised to hear it said that sea-tangle tents were dangerous. He had used them for fifteen years, and had never seen any trouble arise from their use. They had great advantages in dilating the

cervix and internal os. One advantage was that they never got foul as other bodies did when put into the uterus. This was owing to the iodine and other salts contained in the tents which were always aseptic. As regarded the sponge-tent, the disadvantage was that the lower portion was apt to come away leaving the upper portion. On one occasion it took him a quarter of an hour to remove a piece which had been left behind. He thought there was danger in using the sponge-tent for that reason ; moreover, they could not be kept so clean as the sea-tangle tent.

Dr. ROUTH said he had used the sea-tangle tents and had cleansed them himself previously by antiseptics.

Dr. FENWICK referred to a case in which a piece of the omentum had got into the tube, and it was removed by inserting a piece of wire which had been made red-hot. He thought it was an expedient which been thought of by their Honorary Secretary.

Mr. TAIT said that in such cases he simply turned the tube round. Each time he went to the case he gave it a turn and the omentum came out.

Dr. FENWICK said that in the case he referred to that had been done, but it was not successful in preventing the accident, whereas the use of the red-hot wire did succeed.

The PRESIDENT said he thought that the man who left the sea-tangle tent in for forty-eight hours exposed his patient to a danger that no practitioner ought to do. When they had been taught that dilatation was not dangerous he did not see why it should not be done by the sea-tangle tent, but he would certainly remove it at the end of twenty-four hours. If they made an incision they must sew it up again.

Dr. BANTOCK, in reply, said the question of the sea-tangle tent had called forth more discussion than he expected. There was such a thing as stenosis of the internal os. With reference to the question of removing the piece of omentum from the tube, he said he should not like to resort to the method mentioned by Dr. Fenwick, nor was he satisfied with

the statement of Mr. Tait. It did not do to simply turn the tube round till it came out. If the portion were tumefied and there was constriction it would resist any force they could bring to bear.

The PRESIDENT said he thought Mr. Tait said he gave the tube a turn every time he looked at the wound, not that he wound it round and round until the omentum fell out.

Dr. BANTOCK said he thought he had understood Mr. Tait aright, and that if the tube were sufficiently turned round the omentum would fall out. He thought the less the tube was interfered with the better until it was time to take it out altogether. His object had been to call attention to stricture of the internal os as a cause of dysmenorrhœa, and he had purposely omitted all mention of treatment, and was therefore surprised that it should have been discussed at all. With reference to the statement of Dr. Routh in regard to the use of the galvanic current in cases of stricture of the internal os he would like to ask him if his statement was based on personal observation, or upon imagination.

Dr. ROUTH said his conclusions were based upon personal observation, not on theory.

Dr. BANTOCK said he should like him to prove his case. It was not sufficient to say that the patient had had no return of the dysmenorrhœa for a few months. The same result could be obtained from the sea-tangle tent. He must express his dissent from Dr. Macnaughton Jones. He had not himself met with the difficulties referred to. With a sea-tangle tent they got all the dilatation they required. He entirely disapproved of the use of the tent for more than twelve hours at a time, and he would prefer to get gradual dilatation rather than get it quicker by introducing two at a time. Rapid dilatation produced the most unfavourable results. The question of treatment was outside discussion. The causes of dysmenorrhœa were legion, and the condition might depend upon the uterus or upon the ovaries. He had never had any difficulty with the sea-tangle tent, but if he could not get it out in twenty-four hours he left it in forty-eight hours. They

lost the benefit of the tent if they got it out by force. It was better to leave it in twenty-four hours than to insert a second, which was likely to set up inflammation. The sea-tangle tent was free from bad odour, and that was one of its advantages.

Adjourned Discussion on Dr. MACNAUGHTON JONES'
Paper on Massage.

Dr. BANTOCK regretted that Dr. Barnes was not present to open the discussion on that eloquent paper. He agreed with the lines taken by the author, and he thought he had shown that treatment by massage had degenerated from a scientific method into a system of quackery. He thought it was high time the question should be brought before the Society in order that the medical profession and the public generally might know what was meant by massage, and the abuses of which it was capable. He was not prepared to criticise the remarks that Dr. Jones had made as to the physiology and chemistry of massage. He was inclined to think that there was a good deal of high faluting about it. He thought a great deal must be taken for granted if they were to swallow all that was said about the physiological effects of massage. The author had spoken of the method increasing the body temperature, and again that there was a fall in the temperature. That was somewhat contradictory, and he did not think they could draw any conclusion from such a statement as that. Nor did he think that the other matters of physiology and chemistry were much more satisfactory. The first instance given was interesting because it showed that the patient had been subjected to many operations under a wrong diagnosis. She was suffering from a decayed tooth, the removal of which cured her. But massage was abused in a much more serious way. In that case it arose from ignorance, but there were other cases in which this could not be said, and for his own part he had seen a good deal more of the abuse of massage than of its use. The first case came under his notice five or six years

ago. The patient was a woman who had had several children. She was brought to this country from the continent, and was recommended to undergo a course of massage. He said he had never seen a case more unsuitable for massage. The ovaries were in a state of sclerosis with small cysts, and there was no doubt that the presence of this disease was the cause of her illness. It was a case in which massage would have been abused if tried. He removed her appendages, and she made a perfect recovery, and was completely cured. Another case was that of a young married woman. She was recommended massage, and the treatment was to have cost her two hundred guineas. It was a case of retroversion with subinsolution, with the usual signs and symptoms of that condition. A pessary kept the uterus in position, and general treatment restored her health speedily. There was one point to which Dr. Jones had called attention, and in language very appropriate to the subject. He referred to uterine massage, which involved so much fingering. He failed to see in what respect whatever massage could be applied to the uterus. He thought the way in which Dr. Jones had treated the subject would be very useful to the profession, although the author credited it with a wider field of usefulness than he himself did.

Dr. EDIS protested strongly against this method of massage. It seemed impossible in a professional assembly to discuss the subject in the way it deserved; it was simply revolting to expect any medical man, with any sense of decency left, to make daily visits to a patient for several consecutive weeks and finger her pelvic viscera about for a quarter of an hour at a time; the idea was filthy in the extreme. They must draw the line somewhere. Since the reading of the paper he had been inundated with ladies wishing engagements, and he had had more calls from them in one month than from patients needing massage in a twelvemonth. He wished to enter an energetic protest against such a system becoming fashionable and having the sanction of the profession.

Dr. GRIGG referred to some cases in which massage had been improperly resorted to, but he added that personally he had found great benefit from the treatment. It could be applied to the liver and stomach with the most beneficial results. He confessed that he knew nothing of massage of the uterine organs.

Dr. RUTHERFOORD thought the discussion had gone rather wide of the mark in discussing chronic cases of constipation ; they were hardly gynæcological, and he thought they ought to restrict discussion to gynæcological subjects.

The PRESIDENT said these were not cases of uterine massage at all. He regretted that so much heat had been introduced into the discussion of massage of the internal organs. A practitioner had to cure his patient, and there was no reason why he should not resort to massage of the uterus if, by such means, he could effect a cure. Similar objections had been urged against the introduction of the speculum. If massage had been abused, it was because it had been a success. He had no doubt they would find it the same with massage as with the introduction of the speculum.

Dr. MACNAUGHTON JONES, in reply, said he had distinctly stated in his paper that he had never used massage in internal pelvic conditions because he was afraid of the danger of such a course ; nor had he used such strong language in condemnation of internal massage as had been used that evening. He said he would not criticise results of which he had had no experience. He observed that part of massage alone had found favour in this country. He entirely differed from the President when he said there was an analogy between the use of the speculum and massage.

The PRESIDENT pointed out that he only drew attention to the opposition to the speculum as being analogous to that now being directed against massage.

Dr. MACNAUGHTON JONES said he had understood the President to imply some sort of analogy between the use of the speculum and the present use of massage. He also took

exception to the present form of internal massage as practised by Jackson and others who were quoted. First, there was the passing the fingers into the vagina and working the uterus up and down, and from behind, forwards, &c. He said that as far as the scientific application of massage to the uterus was concerned he thought it came within the reach of some of the observations that had been made by Fellows of the Society that evening. Referring to Dr. Bantock's remarks, he said that in the main he had read his remarks fairly. He had endeavoured to treat the subject from the point of view of what was done in London houses and London hospitals. Looked at in an unprejudiced light it could not be regarded as quackery. He did not agree with Dr. Bantock either when he stigmatised the physiology and chemistry of massage as high faluting. He took a broad view of massage, and he maintained that it was only by taking the physiological effects of the process into account and applying their knowledge to the pelvis that they could hope to arrive at good results in the pelvic region. It was well known that except in rare cases there was no great rise in temperature ; but in some cases, as he had pointed out, he had found it to fall. The failure of massage, when applied to unsuitable cases, was not a fair argument against massage. He believed the Weir-Mitchell treatment had been much abused. That system, he thought, had injured massage in this country. The scientific application of this plan of treatment had been mixed up with the grossest and most arrant quackery. The application of the system to pelvic troubles, which had fallen into rival hands, that is, into the hands of operating surgeons, had led to comments being made which were prejudicial to massage. He had been struck with the remark that costiveness was not a gynæcological trouble. He said that no one who had given much attention to gynæcological cases would dispute that costiveness was often at the root of all the trouble. He had been grievously disappointed at the discussion. He had purposely taken a broad view, and he had expected a discussion on similar lines. He had not intended to write a

paper on the abuse of massage, but he might have done so from the turn the discussion had taken. It had been his intention to deal with massage in an unprejudiced manner, but he saw that with ignorant women, and what with persons who called themselves masseuses and masseurs, who might as well be blacksmiths as anything else, sailing under the patronage of fashionable physicians, the result had been the quackery which had been brought before them. It was that indiscriminate and barbarous use of massage to which he had referred that was greatly in vogue in London at the present time that had brought it into disrepute. It was in view of this evil that he had determined to bring it before the Society. He had had a case exactly like that of Dr. Grigg, which showed how massage was abused. He did not know there had been any reference to massage before, but he was quite willing to stand by that clause in his paper which referred to internal massage. So far as he was at present able to say, he did not doubt that the scientific application of massage might be resorted to in internal troubles with the best results, but as at present applied it might be followed by far more serious results than the benefits that might accrue from it.

The meeting then adjourned.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 10, 1889.

A. V. MACAN, B.A., M.B., PRESIDENT, IN THE CHAIR.

Present : 24 Fellows, 2 Visitors.

The following were elected Fellows of the Society :—Dr. R. Douglas, Dr. J. L. Callaghan, Dr. A. T. Scott.

Dr. R. T. SMITH said that by the kindness of a colleague he was enabled to show a specimen which was one of unusual interest. It consisted of the stomach much contracted, and of the ovaries and uterus removed from a patient, and which showed changes of great rarity. There was fibroid thickening of the stomach, intestines, peritoneum, ovaries, and pelvic viscera, and the case had a peculiar interest from a clinical point of view, because the patient came to the hospital with a large abdominal swelling, which naturally caused the question of operation to be discussed. It also raised the question of the remote consequences of chronic pelvic inflammation.

Case of Diffuse Fibrosis. By Dr. R. T. SMITH.

A. L., æt. thirty-five, married twelve years, one child ten years old.—For three or four years has noticed the body getting larger, associated with some smarting pains in the abdomen and back. About one year ago she began to suffer from loss of appetite and vomiting, the latter occurring about two or three times a week, and very soon after meals. The dyspepsia and enlargement became so aggravated, that for a month she has been unable to leave her bed. For the past four months the navel has protruded to the size of a Barcelona nut, and it was also red and tender. No diarrhœa ever ;

micturition normal. Patient is subject to night sweats, and an occasional cough, and is much emaciated.

Previous history.—"Always a bilious subject." At her confinement she had an attack of inflammation, which kept her in bed one month. The veins of her arms and legs were much swollen and painful.

On admission (Nov. 3rd), abdomen was distended uniformly, girth at umbilicus being thirty-three inches. The most notable feature was a varying resonance, which developed slowly on change of position, and the diagnosis accepted was a ruptured cyst, and next in probability, malignant disease of the omentum.

Fluctuation could be made out, and digital pressure elicited a yielding of the parietes, with small hard masses below. Per vaginal examination the uterus was found fixed in all directions. The anterior cul-de-sac was occupied by an elastic tense-swelling. On another occasion the note taken was, abdomen conical, the umbilicus being the highest point. Flanks resonant on superficial and deep percussion.

On Nov. 27th, in consequence of the severe vomiting and increasing enlargement, she was tapped, seven and a-half pints of fluid being removed, the first portion being clear and straw-coloured, the latter portion turbid and gruel-like. Nodular masses were now easily felt, and the diagnosis of omental cancer seemed absolutely settled. The patient had to be tapped a second time on Jan. 10th, and died a fortnight later, the vomiting being extreme, and having this curious feature, that she would during a meal vomit the portion already taken, and then continue until the whole was finished.

The temperature was normal.

Post-mortem made forty hours after death by Dr. Norman Dalton :

"Body much emaciated. Thoracic organs normal, except that there were numerous old pleuritic adhesions on both sides.

"*Abdomen.*—Liver and spleen normal, except as regards the peritoneum over them.

"*The peritoneum* was enormously thickened throughout its

whole extent and quite white and opaque. Here and there it was slightly nodular, but on the whole it was merely finely granular. There was an adhesion of the great omentum to the back of the pubes, but otherwise the peritoneum was singularly free from adhesion. On the other hand all the organs were contracted from being encased in a dense fibrous capsule formed by the peritoneum over them. Also the small intestines were crowded together in a bunch on account of the shortening and rigidity of the mesentery; within the peritoneal cavity was a large quantity of turbid serum.

"The stomach was very much reduced in size and its wall was quite rigid, both from the thickening of the peritoneum over it and also from a fibroid enlargement of the submucous coat. The wall was half-an-inch thick. In the posterior wall near the pylorus and towards the greater curvature was a deep ulcer, with rough edges, which, however, were not much raised. There was no perforation; neither the duodenum nor any other part of the gut showed any thickening of the submucous coat, though the subperitoneal coat was much thickened.

"The kidneys showed dilatation of the pelvis and calices, probably from some obstruction of the ureter by the thickened peritoneum.

"The uterus was fixed in acute ante flexion by the thickening around it. At its sides the structures in the broad ligaments were welded together by the same lesion. The ovaries were rather larger than normal and firm and fibrous.

"Microscopic examination showed that the universal thickening of the subperitoneal connective tissue, was due to a large development of new fibrous tissue. The latter could be seen in all stages of its growth, viz., from granulation tissue to well-formed fibrous tissue. The submucous connective tissue of the stomach showed the same condition, and throughout there was no evidence of cancer. The ovary also was free from malignant disease."

Dr. Bristowe very briefly refers to such cases as being very infrequent, and as resembling in symptoms the early stages

of carcinoma. He designates the condition "fibroid infiltration," or cirrhosis, and considers it the same as occurs in the neighbourhood of chronic ulcer. The morbid growth differs from scirrhus in consisting wholly of fibroid tissue.

Dr. H. Fagge has a very interesting note.

"Another organic disease of the stomach is one in which its walls are uniformly thickened without any morbid growth, its cavity being greatly reduced in size. It is called 'fibroid induration.' I shall have to mention it as being occasionally the starting-point of a general chronic peritonitis, but I am not sure it always sets up such an affection. The coats of the organ may be half to one inch thick, the cavity only capable of holding four or five ounces of fluid. A tumour may be discoverable, and this may be more or less resonant on percussion. Probably it is impossible to distinguish these cases from diffuse sarcoma of the stomach."

In another place he suggests this condition of the intestines and stomach may be the result, or at least in some way associated with chronic pelvic inflammation.

Dr. BEDFORD FENWICK mentioned, in reference to the extreme rarity of the condition, that he had ransacked the records of the Pathological Society, which was a perfect repertory of all that is strange and rare from a pathological point of view, but he had not been able to come across anything at all like it. The strange point, and the point of most interest to gynæcologists, was that these changes seemed to have started in the pelvic region. He would move that the specimens be referred to a pathological sub-committee.

The motion was seconded by Mr. TAIT, and was agreed to unanimously.

Dr. ROUTH asked whether the condition had anything to do with what he was disposed to call an epidemic of fibroid? He had never heard so much about fibroid in women as at present, and, as cancer had increased in frequency, he asked whether fibroids had done so also, and if so, wherefore?

Dr. TRAVERS asked whether there was any history of syphilis or spirit drinking, and as to the dietetic habits of the patient.

Dr. RUTHERFOORD asked whether there was any tubercular history.

Dr. SMITH, in reply, said that for four years the patient had been subject to vomiting and pain after eating. There was no history of syphilis nor spirit drinking. In reply to a question by the President, he added that unfortunately no note had been taken as to the condition of the menstruation.

Dr. HEYWOOD SMITH showed a specimen removed from a patient on March 22 at his private hospital. She was thirty-two years of age, and had been married ten years. No pregnancy. She had been ill for some years, with pain more especially in the left inguinal region. She had begun to menstruate at the age of thirteen, the flow lasting three days ; it was scanty, and followed by the expulsion of clots. He operated upon her, and found that the left ovary was a dermoid cyst, half the size of the fist. The oviduct was enlarged at the fimbriated extremity, and was blocked and filled with soft inspissated pus. The right ovary was normal, but the oviduct contained five small tumours, which the author considered to be fibroids. The lumen of the oviduct seemed to open into the centre of the one at the periphery. The tumour at the uterine end was distinctly fibroid, and was situated so close to the cornu of the uterus that it was with difficulty that the ligature was passed between it and the uterus, and the little tumour had to be cut through, leaving half of it attached to the distal portion of the ligature.

Mr. LAWSON TAIT thought at first that what Dr. Smith had taken to be fibroid growth was in reality cheesy pus contained in a thickened tube, but he said that the specimen required very careful examination before one could affirm its exact nature. He wished to point out that the occlusion at the end of the tube and the club-shaped infundibulum was clearly indicative of inflammatory action, which was probably the cause of the mischief. That was an argument against its being a neoplasm. He admitted, however, that the two conditions might coincide.

Dr. ROUTH suggested that this specimen also should be referred to the sub-committee for examination and report, and this was agreed to.

Dr. HEYWOOD SMITH said he thought that Mr. Tait had confounded the two oviducts. In the right oviduct the fimbriated end was club-shaped. When he slit it up the lumen of the tube seemed to open into its middle. It felt, too, quite different from the other side.

Dr. BANTOCK said that his experience led him to coincide with the remarks made by Mr. Tait: It appeared to him to be an exaggerated condition of what they called chronic salpingitis, without any accumulation in the tube.

Dr. ROUTH said that the condition often resulted from an attack of metritis, the effect of which when passed was often to leave a fibrous tumour. He had in those cases which he had seen at a very early stage been enabled to verify this mode of origin. There was nothing in his own experience to contradict the idea that inflammatory changes had set up this condition on the other side. He affirmed that inflammation was often the cause of the production of fibrous tumours.

Dr. HEYWOOD SMITH then exhibited the ovaries, each about the size of a small Tangerine orange, removed from a patient on the 5th inst. Each contained a cyst with a smooth lining, and as he was unable to discover any oviducts, he wanted to know whether these cysts were dilated ends of oviducts, or whether, in this case, the oviducts were absent. The patient was twenty-four years of age, and had been married six and a half years. No children, but she was said to have had four abortions. For five years she had been subject to attacks of hystero-epilepsy; at first, nine or ten daily. Then she had brain fever for seven months, and was delirious off and on for three months after the second abortion. She only had one fit before marriage. She first menstruated at ten years of age, and the flow was regular, lasting about seven days. Both ovaries were adherent.

Mr. LAWSON TAIT said that the point of interest was as

to the stories of the miscarriages. He observed that of course if she had had a miscarriage she must have had tubes, but these stories of miscarriages were so common that unless one got some distinct evidence of their having occurred he was always inclined to disregard them. The history, on examination, often amounted to this : that there was an arrest of menstruation for a month or two, and then some discharge, but such discharges did not constitute a miscarriage. Either there were no tubes to remove, as in the case recorded by Dr. Angus Macdonald, who had failed to complete the operation, and upon whose patient he, Mr. Tait, had since operated, but with the same result, because there were no tubes to remove ; or they must have been left behind by Dr. Smith. He was inclined to take the former view. He observed that it was perfectly possible to get completely developed ovaries and no tubes at all.

Dr. BARNES said that it was always a great consolation to a sterile woman to be able to say she had a miscarriage. His experience coincided with that of Mr. Lawson Tait. He thought that the statements as to miscarriages ought not to be accepted unless the remains of the ovum had been seen. He said that he believed that the ovary had something to do with conception, and that it was possible to get a simulated pregnancy. The ovary excites the uterus to its function, even if there be no tube. He could quite understand the influence of the ovary upon the uterus in bringing about the development of a decidua which might be the simulacrum of a pregnancy. It might be passed with blood after a suspension of menstruation, and so give rise to the impression that a miscarriage had taken place. The uterine elements were present, but not the ovarian elements. Such cases might easily deceive the patient and even the medical man, if the latter did not take the trouble to make a microscopical examination of the tissues extruded.

Mr. LAWSON TAIT added that in the case mentioned by him, one ovary had been removed by Dr. Macdonald four years before, and he himself had removed the other ovary,

together with the fundus of the uterus, yet the patient had continued to menstruate regularly, although she was now free from the pain which was formerly complained of.

On the suggestion of Dr. HEYWOOD SMITH this specimen was also referred to the sub-committee for examination and report.

On a case of epileptoid seizure in which erotic symptoms were manifested to a marked degree. By Dr. ROUTH.

THE subject of this record came under my care as a patient somewhere about the year 1874. She was then unmarried, and suffering at that time under leucorrhœa, also with ulcerations of the cervix, and for a time under follicular vulvitis of Hugnirs, pustules and papulæ having formed in the labia and vestibule. She was of a fair complexion, very neurotic, with uterine troubles, backaches and dysmenorrhœa which had persisted for years. She complained occasionally of having something very like fits, but these I never saw till much later in the history of the case, but I gathered that they were mainly hysterical. She said she did not foam at the mouth, and except that she felt very queer and frightened, she did not fall asleep after them. It was admitted that she had been addicted to imprudent habits from early childhood, and was evidently a woman of fully developed sexual feeling. She subsequently married and had three children, one of whom died with head symptoms; the others are healthy and strong. From that time to this she has continued to be a patient of mine, so that our relations were very friendly, and as I have also attended several other members of her family, as well as her own children, she is grateful, and so far I can depend upon her record of her symptoms as truthful, and have full assurance she would not speak unkindly of my treatment in her case. I have, in fact, treated her for many of the diseases to which women are liable; congestion of the womb, hepatic affections with hæmorrhoids, and several severe attacks of lumbago, and frequently for unusual severity in her

hysterical seizures, which have been more marked, and lately, though occurring at longer intervals, more positively epileptoid. Synchronously with these recurrences, the uterine symptoms with intense vaginitis pruritus vulvæ have been observed, and the fits have sometimes followed conjugal relations; the fits being sometimes unusually strong, sometimes incomplete. There was no aura clīptica, but an unusual feeling of fright at other times preceding a fit, but it could always be staved off by a dose of valerian and assafoetida, taken when these early symptoms presented themselves. So long as she continued the use of bromide also they did not recur.

October, 1888.—She is now forty-five. The catamenia having been unusually copious, and very irregular. The uterus is very large, reaching above the pubes and heavy, progression is difficult, and always accompanied with backache. She is also suffering from piles. The passage of the sound *in utero* is extremely painful, and also followed by blood. Various internal and external remedies were employed, including carbolic acid, iodine and creosote, to the cavity, local depletion with small doses of mercury, rheumatic mixtures with some benefit. But the uterus continued unusually large and heavy. The external os was small, and the canal up to the internal os contracted. The catamenia lately were suspended. There were head symptoms, confusion, headache, &c., and violence of temper with something more doubtful displayed in her actions. I therefore determined to pass a negative electrical continuous current through the womb, the positive pad being placed on the belly, hoping thereby to open the os and promote a menstrual discharge, and reduce the uninvolted organ. She bore it well up to about 90 milliamperes, when, to my annoyance, I noticed that sexual orgasm occurred. I, of course, pretended not to perceive it, but as soon as completed she began to wander, imagining some terrible accident had occurred to her husband. I had removed the electrical apparatus and stopped the current as soon as I could, but before I could place her on a chair she went off into a regular epileptoid attack, foaming at the mouth

and convulsed. The attack was soon over, and she became somewhat comatose, but not to any very marked degree. I removed her to an adjoining room, and left her in charge of a young lady and relative, till recovered, while I attended to my other patients, but she became excessively amorous towards this young lady, frequently asking to be kissed, and throwing her arms round her neck, probably not altogether conscious of how she was acting. In about an hour she came completely to herself, and was able to return home in a cab. A bloody discharge *per vaginam* soon followed, with general sense of relief.

Remarks.—This case I was anxious to record as one in which epilepsy was preceded and succeeded by marked sexual excitement. We are all acquainted with those cases in which epilepsy precedes a catamenial period, and many women will tell you that the sexual orgasm is also strongest before or after a period. As a period did follow in this case, it might be ascribed to this cause, but the fact that an ordinary conjugal relation had frequently before induced a fit without a period following, points rather to the sexual orgasm as the cause of the epilepsy, *plus* some peculiar condition not otherwise discovered, especially although epilepsy often followed conjugal relations, it was by no means a universal occurrence.

Secondly.—Did the electrical current induce it? Out of many hundred applications this is the only case in which I have detected it during its employment. In one other I think I saw it imperfectly developed. But I have seen far more marked symptoms under the delirium of chloroform, or even ordinary examinations, so it may only have been a synchronism.

Thirdly.—The one important feature, however, in this case is the erotic symptoms which not only preceded, but continued after the epileptiform seizures. Two cases of a similar kind in which charges were brought against medical men not very long ago followed the same course. Perhaps, had I not been an old friend, and judged by herself incapable of abusing her confidence, my patient might have supposed or believed that I

had taken undue liberties with her person. She seemed even with the lady friend subsequently to have no control over her amorous inclinations, and retained but a shadowy remembrance how far she or the lady (a perfect stranger), was the amorous person or herself. So far, this case is one of a class of which I think it would be well if our judges knew more of than they do, where patients firmly believe and detail with "much minuteness events which deviate so little from what is possible that on several occasions trials have been instituted upon such accusations, and in a few instances convictions have followed" (Ziensen, vol. 14, 548)—one of the most cruel that can occur to a medical man.

Dr. HILLS said it would be a great advantage to fellow practitioners if the details of this case could be preserved in the transactions so that they might be available on any future occasion.

Mr. TAIT referred to the well-known case of Dr. Bradley, who was accused by an epileptic woman of having assaulted her. He pointed out that the woman was a confirmed epileptic, and was not of irreproachable morality, and there was every reason to believe that there was some peculiar sexual excitement in connection with her attacks. The assault was alleged to have taken place in a branch surgery, the floor and ceiling of which were so thin that it was impossible that the persons above and below would not have heard the noise of anything like a struggle. The woman had an attack in the presence of the accused, and doubtless firmly believed, in virtue of the sexual excitement which accompanied her attacks, that she had been assaulted. Dr. Bradley, strong in his innocence, had neglected to bring forward any medical witnesses to deal with this feature of the case, and he was found guilty by the jury and sentenced to two years' imprisonment. Ultimately, however, some new facts in the case were brought under the notice of the Lord Chief Justice and he was released. He said that it was important to notice the association of a certain form of epilepsy with an erotic condition, an association which was as certain as possible.

He mentioned also that some patients, in passing through the stages of anæsthesia, were subject to the same excitement. He had seen that happen over and over again, and in one case the patient had mentioned the matter to him afterwards, probably because she had some misty recollection of having done something which called for an explanation. These things ought to be widely known. They ought to be in the text books, and men should not be sent to prison on charges made by women who were very likely subject to sexual disturbances of this kind. He added that another curious point was the charges brought by children under the new law. He had been engaged by the Birmingham police to investigate these cases, and in only one out of twenty or thirty was there reason to believe that such an offence had been committed.

Dr. BARNES said it was important that this case should be put on record. He mentioned that some years ago he had gone down into the country to give evidence at the assizes on behalf of a highly-respectable practitioner, who was accused of having committed an assault on a female patient in a room in his own house, which was so surrounded by doors on every side that if anything of the kind had taken place it would certainly have been overheard by those in the adjoining rooms. The complainant was apparently a respectable woman, and in support of that statement it was given in evidence that she had formerly been in the employ of a lady of position. He gave evidence strongly in his favour, and the accused was acquitted. He added that the lady in whose employ the woman had been, happened to be a patient of his own, and when she was asked what she thought of the case she observed that the woman's statements were altogether untrustworthy, for she was always making charges against some one or the other. That showed the necessity of enquiring into these statements very carefully.

Dr. HEYWOOD SMITH said that the relation of the electric current to the production of these feelings ought to be cleared up. Dr. Routh had laid great stress upon the fact that the electric current had been passing for some time preceding the

attack, and he would like to see it made clear whether these two facts stood in the relation of cause and effect. If so, they would have to give up the Apostoli treatment.

Mr. LAWSON TAIT said that one would like to know from authorities on epilepsy how far the erotic excitement was the cause of the epilepsy. They knew that among rodents the sexual act was frequently followed by a slight epileptiform seizure, and he instanced the case of the great Napoleon, who often revealed his amours by an epileptiform attack. Asylum managers, too, knew that epileptics were often masturbators, and the practice often precipitated an attack.

Dr. HEYWOOD SMITH pointed out that in the case he had brought before the Society that evening the patient had no fits before marriage, but afterwards often had as many as seven or eight in a day.

Dr. BEDFORD FENWICK insisted upon the importance of remembering the connection that existed between erethism and mental trouble. Alluding to the fact that epileptics often did acts during the attacks of which they had no subsequent recollection, he observed that it had been made almost a principle in law that if a person were proved to have relations who were subject to epilepsy that fact raised a strong presumption of the irresponsibility of the accused. He mentioned that in a recent case almost the only evidence brought forward on behalf of the prisoner was that there was a strong suspicion of epilepsy. The existence of epilepsy had been brought forward in quite a number of cases as proof of the irresponsibility of persons accused of murder, &c. He said that these facts ought to be made widely known, and it should be laid down as a principle that when charges were made by women with a history of epilepsy they should only be believed on evidence of the most unquestionable kind. He mentioned, in reference to the possibility of there being some connection between the use of the galvanic current and the epileptic fit in this case, that at one London Hospital they used to have a great number of epileptic cases before the Hospital for Epilepsy had come to be as widely known. These patients often had

attacks while waiting in the out-patient room, and they occurred principally while they were getting their tickets stamped. The stamping was done very quickly, and made a sudden "wurring" noise which seemed to send the patients off. He said that it was well substantiated that slight operations would suffice to bring on an attack, and even taking chloroform or ether. All this proved how careful it was necessary to be when dealing with epileptic patients as to the use of galvanism.

Dr. PURCELL asked whether there was any epileptic history in Dr. Routh's patient.

The PRESIDENT said the application of the current to the interior of the uterus was not likely to give rise to erotic feelings. The cervix was sensitive, but that might be protected. He asked whether the woman in Dr. Routh's case had expressed the opinion that liberties had been taken with her. He said that it seemed to have been taken for granted that she would have taken an action against Dr. Routh if she had not been influenced by her feelings of friendship. He thought that gynæcologists were in a better position than most ordinary practitioners, since patients came to them expressly for the purpose of having their reproductive organs examined.

Dr. R. T. SMITH said he had been consulted only that week in reference to a young lady, twenty-three years of age. The mother wished to know whether she might marry. Six years ago she was distinctly epileptic. Apparently it was real epilepsy, although there was no history of epilepsy in the family. He was informed that the girl had given way to masturbation in her younger days, but she had relinquished the habit on her mother speaking to her seriously on the subject, and now for five years she had not had a single attack of any kind. He said that that would seem to establish the fact that there is a connection between erotic excitement and epilepsy, and if the erotic excitement could be overcome, then the attacks might be prevented.

Dr. ROUTH, in reply, said his only object in bringing the case before the Society, was to place on record a well authen-

ticated case in which erotic symptoms preceded and followed epileptoid attacks. He had in his mind two cases which occurred to practitioners in Lambeth. In one of them the medical man was accused of having taken advantage of a woman while in an epileptic fit. He pointed the inherent improbabilities of the charge, and mentioned that no sooner was one charge made than another girl came forward with a similar story. He thought, therefore, that the case ought to be recorded for use at some future trial. It was for the same reason that he read his paper on "Nymphomania" in order to show the absurdity of certain charges made by such subjects. He had urged at the time that a copy of that paper should be sent to all the judges, but that had not been done. The case alluded to by Mr. Tait showed clearly how an innocent man might in one minute be ruined, because the judges did not understand these things. He said there was no doubt that women who habitually masturbated might become epileptic, and that was the reason that Mr. Baker Browne cut away the clitoris. He thought that the current had given rise to somewhat similar symptoms in one other case, but they were not as well marked. He observed that even an ordinary vaginal examination was sufficient in some women to provoke the sexual orgasm; therefore it would not apply to electricity only. The argument therefore would not militate against electricity more than against ordinary examinations. He insisted on the fact that in his case, even the ordinary conjugal relations sometimes sufficed to bring on an attack. He said that the only precaution he would take before employing the current in such persons, would be to have a third person present or near at hand. In his case the woman certainly did not know what had transpired. What he wanted was not to save the woman, but to save the man who might be made the victim of these unconscious charges. He insisted upon the difference between hystero-epilepsy and real epilepsy, and in his case it was a genuine attack of epilepsy. The patient had not accused him of having taken liberties, but she had retained her impressions, and had expressly author-

ised him to publish the case because she felt that other people under similar circumstances might bring a charge against medical men. He hoped the history of the case might be the means of saving honourable men from being convicted on such charges.

The Society then adjourned.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, APRIL 24, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT: 22 Fellows, 4 Visitors.

The following were proposed for election: Joseph Osborne Closs, M.B., M.S.Edin., Dunedin, New Zealand; Henry Widenham Maunsell, M.B.Dub., Dunedin, New Zealand; Isaiah du Zouche, M.D., Dunedin, New Zealand.

Dr. BANTOCK said they would remember that a short time ago the question was raised as to the treatment of fibroid tumours, whether by hysterectomy or by removal of the appendages. The specimen produced by him was one requiring removal of the tumour itself. It was a soft œdematous fibroid of very rapid growth. He called attention to the peculiar aspect of the tumour itself, and to the very great thickness of the uterine walls which were from one and a-quarter to one and a-half inches in thickness. The patient was a married woman, thirty-four years of age. She had five children, the youngest being three and a-quarter years. She had not been aware of the existence of the tumour for more than four months, therefore the growth must have been exceedingly rapid. There had been no great amount of menorrhagia. It was the rapidity of growth and the inconvenience that called for interference. The operation was performed on March 27th, and the tumour weighed six pounds nine ounces after the blood had drained out. The subsequent progress of the case was quite satisfactory, and the patient was up and about. He said that he was able to procure a very good pedicle without treating the parts separately. It would be observed that one of the ovaries was larger than the other.

The second specimen of fibroid tumour was more complex. They would observe several hard pedunculated fibroids: There was some trouble in procuring a pedicle. One of the growths did not seem quite as hard as the others. The specimen was removed from a single lady aged forty-five. If her statement were to be believed, and he said he saw no reason why it should not be credited, the tumour must have grown with remarkable rapidity, for the medical man who had called him in consultation had assured him that two months before he had examined the patient's abdomen very carefully without finding any trace of a tumour, but that after she had been away for some time she returned complaining of serious pressure symptoms; he again examined her and at once detected the tumour. The legs were then beginning to swell, and the discomfort was extreme. Menstruation was very slightly increased, and had never been excessive. Vaginal examination revealed a rather unpromising state of things, because one of the outgrowths ran down the back of the uterus into the pelvis behind the cervix, and it seemed almost impossible to get a pedicle. As, however, she was suffering a good deal, and it was growing very rapidly, he determined to try what could be done. The patient was operated upon on April 3rd. On turning out the tumour, and on putting his hand into the pelvis he found one mass running down into the bottom of the pelvis behind the cervix. The difficulty was as to how to get it out. Ultimately he put on an elastic ligature below the level of the tumour, and tightened it as much as possible, then he divided the peritoneal envelope right round, the effect of which was to liberate the tumour, which then bulged into the incision and was easily enucleated. He sponged the cavity out, and was then able to get the stump above the elastic ligature, and thus to get a very fair pedicle. There was a considerable amount of pressure on the pedicle, and some threatened sloughing of the parieties, but the patient had done remarkably well. He took off the *serre-nœud* at the end of a fortnight. The temperature never exceeded 100°F. The rapidity of the growth was rather remarkable, for with

one exception they seemed to be of the hard fibroid variety. It showed the value of the principle of enucleation in obtaining a pedicle, for without the process of enucleation it would have been impossible to obtain a pedicle at all long enough to admit of supporting pins being applied.

There were two other specimens of considerable interest. They were cases of the results of salpingitis. He said the question had been mooted as to whether gonorrhœa was not the cause of the great majority of cases of salpingitis, but he had failed to be convinced by the evidence which had hitherto been brought forward as to how far that explanation held good. He believed, indeed, that only a few cases were the result of gonorrhœal infection. He had brought forward that specimen in support of his views, for after a most careful investigation of the history of the case, failed to elicit any evidence whatever of gonorrhœal infection. The patient was a young married woman, twenty-four years of age; she had been married a little over four years, but had never been pregnant. According to her account the symptoms dated from before marriage and since marriage she had been more or less of an invalid. The patient had been under the care of most of the staff of the Samaritan Hospital without deriving any benefit, and she had recently come before Dr. Amand Routh, who recognised the existence of a condition calling for operative interference. She was therefore admitted into the Samaritan Hospital and was operated on, on the 17th inst. He called attention to the fact that the large tumour was a cyst which was partially filled with cotton wool. That was a good example of hydro-salpinx, and they would notice the tube running into the cyst in a very marked manner. The cyst contained from four to five ounces of clear fluid.

The second specimen was an example of pure salpingitis with a hydroma attached. The tube was very small, contracted and hard, and he thought that, if carefully examined, it would be found to be the early stage of that condition which was so well marked in the specimen shown on a previous occasion in Dr. Heywood Smith's case. It was quite impossible

to separate the fimbriated extremity from the ovary, so closely was it adherent. The clinical symptoms were simply obstinate pain which nothing would relieve. The hydro-salpinx was not adherent at all, but had rather a short pedicle. On the other side they found some very old adhesions. He said that if he understood the question aright, if gonorrhœa were the cause of salpingitis, he imagined that they would always find more or less pus in the tube, since pus was one of the most characteristic signs of gonorrhœal infection. Here they had nothing of the kind. He believed it was a simple case of salpingitis of the catarrhal kind which was the most common variety of salpingitis. He added that of course he did not wish to be understood to say that salpingitis arising from catarrh might not become purulent. They might have a purulent discharge from the *os uteri*, and in the same way they might get a purulent collection in the tube, but the absence of pus in the tube must be taken as contra-indicating in the strongest way, that the salpingitis was the result of gonorrhœal inflammation.

Dr. HEYWOOD SMITH suggested that Dr. Bantock's last specimen, which presented many points of resemblance with the one he had shown at their last meeting, should be referred to the same sub-committee for examination and report. He said the peripheral extremity of the oviduct seemed to be merged into the ovary itself. With regard to the question of gonorrhœal salpingitis necessarily producing purulent secretion, and, therefore, leading to pyo-salpinx, he thought there might be an investigation into that stage of gonorrhœa, in which the purulent stage passes on into gleet, or what was called "latent" gonorrhœa. He asked whether there might not be set up by cold or sexual relation some inflammatory discharge in the oviduct resulting in a hydro-salpinx instead of a pyo-salpinx. He observed that Dr. Bantock had shown them two very interesting specimens of two distinct varieties of fibroid tumours, and yet the history in both was of rapid growth. With regard to the soft tumour, he asked whether there was any tendency to dilatation of the *os uteri*,

and whether there would be any possibility of the enucleation of that tumour if attempted. He mentioned that he had visited Apostoli's *clinique* on the preceding afternoon, and one of the cases there was a soft fibrous tumour similar to the one just exhibited, and Apostoli thought his system of electrolysis likely to act with greater power on this soft growing tumour than on the hard, though, whether by lessening the volume of the tumour and allowing the uterus to bear upon it and extrude it, or whether the uterus got more power, he did not know.

Dr. MANSELL-MOULLIN asked whether Dr. Bantock had experienced any difficulty in dealing with the pocket left after the removal by enucleation of fibroid tumours. He said that in the case of tumours extending low down into the pelvis it would be impossible to apply the *serre-nœud* sufficiently low to include the base, and he asked what treatment he would adopt in that event. If the *serre-nœud* were placed round the middle there would be a pocket in which accumulations might take place, and he asked whether it had occurred to him that it might be expedient or useful to provide for drainage through the vagina.

Dr. BANTOCK, in reply, said that he had opened the uterine cavity in the specimen alluded to by Dr. Heywood Smith in reference to the removal of the fibroid by dilatation and extrusion through the vagina, and they would at once see how impossible that would have been. The uterine body was quite small, which accounted in some measure for the small amount of the menstrual discharge. The appearance of the uterine cavity would answer that question better than any words of his could do. Even if it had been enlarged they would see that the uterine wall had become so thin in one part that it would have been impossible to effect the separation without opening into the abdominal cavity. It was only possible in harder fibroids, in tumours situated very low down in the uterine wall, and he considered that the only cases at all suitable for removal by the vagina were those which had invaded the cervix or *os uteri*, and in which the tumour was beginning

to pass through the os. Then they could bring it down and remove it piece by piece. Any other method of removing a fibroid tumour which had not already come down into the cervical canal appeared to him to be a very dangerous and serious procedure. The question as to the difficulties resulting from a pocket being left after enucleation was not one which had given him any trouble in cases involving the uterine body as in those two classes. Sometimes, however, they met with fibroids which were invested by one or other of the broad ligaments. Then the case was one for enucleation *en masse* from the broad ligament. He said that last year he had shown a large specimen of the kind, where it was quite impossible to apply the *serre-nœud* or elastic ligature below the base of the tumour. It was a very large tumour of the left broad ligament. It was opened up to the size of the tumour, which weighed eight or ten pounds, and he had obliterated the sac by means of some sutures, thus bringing the surfaces into contact. When, however, the tumour involved the uterine body to the extent it had done in this case, he thought they could always pull up the uterus after enucleation, so that it would be quite easy to get below to the level of the pocket. He said that in some of these cases the uterus had to be pulled up until the broad ligaments were as hard as a piece of board and the pressure might even bury the supporting pins half an inch in the parietes, so that the fear that Dr. Moullin had expressed as to meeting with a pocket of that kind was one he need not trouble himself about.

EDEN HOSPITAL, CALCUTTA.

Case of Ectopic Gestation; operation; death. Under the care of Surgeon-Major C. H. JOUBERT, M.B.Lond., F.R.C.S., Official Professor of Midwifery.

MRS. B——, East Indian, aet. thirty-two years, was sent down from Rouki, North-West Provinces, and admitted on January 31st, 1888.

History.—Married twelve years. One child only, now eleven years old ; never pregnant since till present time. Had puerperal fever after birth of child, lost the use of both lower limbs, and was laid up for six months. Menstruation began at fourteen and a half years, and was quite regular before marriage. After the birth of child began to menstruate again after seven or eight months, and was regular till three years ago. For the last three years the quantity has been less, and there has been bearing-down pain during the periods.

Menstruated from September 18th to 22nd, 1888, but not in October, November, or December. Did not feel well during these months and had some discomfort in standing.

On December 24th, 1888, while playing tennis, was suddenly seized with pain in the chest, then in the front of stomach, and felt very faint. Was put to bed and fomentations applied. Felt better on the 25th, but weak and in some pain. Dr. Amesbury, who attended her, said there was a lump in the right lower abdomen. After this went about as usual, going to a dance on December 31st.

On January 2nd, 1889, she woke in the early morning with severe pain all over the abdomen and retching. The pain came on in paroxysms lasting about five minutes. These symptoms continued all the 2nd, 3rd, and part of January 4th. On January 4th at one p.m. felt quite faint and became collapsed ; was in a stupor, pulseless, very weak and blanched. Was in great pain for two days. On January 5th or 6th what was described as menstruation came on, with moderate pain only. On January 14th or 15th she passed a complete cast of the uterus, about three inches long. This was thought to be an after-birth after miscarriage, but the description by an intelligent nurse, who came down in charge of the patient, showed it to have been a perfect *decidua vera*. The patient continued well till January 20th, when she again became collapsed, with great pain in the right side, when the swelling became distinctly larger. Under treatment—leeches and belladonna—the pain and swelling subsided, and she again rallied and returned to her condition as on admission in Calcutta.

On admission, January 31st, 1889, the patient was cheerful and free from pain. On examining the abdomen a large hard mass was found occupying the lower right side, extending to one inch beyond the medium line on the left side, and to the finger's breadth above the umbilicus. The mass extended backwards towards the spine and appeared to be three or four inches thick. Was movable in the upper part from side to side, but fixed below in the right iliac fossa.

Vaginal Examination.—The external os was patulous, and the cervical canal admitted the forefinger. The cervix was soft and the body of the uterus was merged in the mass to its right. A firm hard mass was felt in the right cul-de-sac, in the right side of the anterior cul-de-sac, and in the right two-thirds of the posterior cul-de-sac. The cervix was not, apparently, displaced to the left. The uterine sound entered without resistance three and a-half ins. with a slight indication towards the left side of the pelvis. The walls of the uterus appeared to be in contact. No stethoscopic signs of pregnancy could be detected, not even a placental bruit. The areolæ of the breasts showed some signs of darkening, but the patient was dark skinned.

Diagnosis was made of tubal or ectopic pregnancy of the right side, with partial ruptures of the sac, probably into the broad ligament, on December 24th, and January 2nd, 4th, and 20th, pregnancy having reached the commencement of the fifth month. An early operation was decided upon, as a fatal rupture was considered possible at any moment. The patient, however, refused to submit to operation till her husband could be sent for from Rouki. This delayed the operation till February 8th.

Operation, February 8th, 1889, 8.30 a.m.—Chloroform was at first administered and then A.C.E. mixture. The patient took fully half an-hour before anæsthesia was produced. The bladder was emptied and the uterine sound was passed to ascertain the exact position of the uterus for a last time. Directly above the pubes there was seen a nodular projection of the abdominal wall, which proved to correspond with part of the placenta.

A two and a-half inch incision was made midway between pubes and umbilicus, and the tissues divided quickly down to the linea alba. Below the tendinous structures the sub-peritoneal fat was found very thick and vascular. On opening the peritoneum the parietal layer was found to be slightly adherent to the omentum, which structure reached quite down into the pelvis in front of the uterus. The vessels of the omentum appeared to be much enlarged, and it was firmly adherent to the tumour beneath, which lay to the right of the uterus, in the right iliac fossa, reaching upwards to two or three inches above the umbilicus, beyond the median line to the left and quite into the lumbar region to the right.

There was no fresh blood in the abdominal cavity. The placenta was evidently situated in the front and lower part of the gestation cyst, from the intense vascularity and firm feel of the parts exposed by the abdominal incision.

The first step taken was to lift up the omentum from below, so as to expose the cyst and find a spot beyond the placenta. On passing the fingers into the pelvic cavity to lift up the free edge of the omentum, free oozing of blood at once occurred, and pieces of dark coloured fibrin were brought up. The outlines of the broad ligament and Fallopian tube were lost in a shreddy mass of fibrin, and the gestation cyst was felt to be firmly adherent to the right iliac fossa. The abdominal incision was then extended downwards for another inch to give more freedom, and the omentum stripped off the cyst wall to the upper limit of the incision. Free oozing of blood from several places took place, controlled, however, by sponges. It became evident that the cyst could not be removed, and that its relations must be as little disturbed as possible. The gestation was apparently tube ovarian, and clamping the tube and broad ligament I thought would not control hæmorrhage, and would damage structures that could not be afterwards removed. The abdominal incision was now extended upwards to the umbilicus, and more omentum stripped off in the hope of finding the part of the cyst beyond the placenta, but without success. The cyst, moreover, being adherent

above and out of sight could not be brought more into view. All that presented, in fact, was the large placenta capping and covering everywhere the rest of the cyst. Its structure was so friable that the least touch gave rise to hæmorrhage. I determined to aspirate in hope that by drawing off the liquor amnii the cyst would collapse somewhat and come more into view. The smaller sized aspirator trocar (Potain's) was plunged through the presenting placenta, and about ten ounces of liquor amnii, at first clear and then blood-stained, drawn off. From this moment the difficulties from hæmorrhage became almost insurmountable. On withdrawing the needle, the opening made by it gaped, and profuse hæmorrhage from the puncture occurred. The placenta appeared to break down with the slightest touch. The cyst collapsed somewhat, but could not be drawn out at all. At last the free edge of the placenta above was detected, and the foetus found lying behind it. On further separating the omentum upwards, a small piece of cyst wall came into view, bulging upwards, but dark purple from contained blood. It was seized by means of a pair of small Tait's forceps, and incised with scissors. Free bleeding from the amniotic cavity took place. A finger was passed in and the foetus felt lying under the covering placenta. With some difficulty an arm was hooked out and retained by means of forceps, the finger then hooking out the breach. The head was delivered with difficulty, as the foetus was between seven and eight inches long. It was apparently dead, showing no signs of movement. The cut edges of the cyst wall bled freely, and were seized with Tait's forceps. The condition of the patient was now very alarming, owing to the great loss of blood, in spite of the tentative application of a pair of large pressure forceps to what could be felt at the right tube and broad ligament. The cut edges of the cyst were sutured to the upper part of the abdominal incision, but the upper end of the opening in the cyst was almost out of view. A silk ligature was passed by transfixing by means of a needle through one bleeding point in the placenta. Bleeding now had almost ceased, possibly owing to the almost moribund

condition of the patient. The abdominal and pelvic cavities were cleansed by means of sponges and washing out with hot water. The abdominal incision was closed with silkworm gut sutures, two drainage tubes being inserted, one leading into the pelvis, the other into the amniotic cavity; by the side of the second the umbilical cord was left hanging out. The patient, however, died while being removed from the table to the bed, in spite of the usual efforts at stimulation.

Remarks.—The growth of the placenta was evidently very rapid during the last month, for Dr. Amesbury wrote that at the beginning of January the swelling in the right side of the abdomen was only the size of an orange, whereas, on admission, the perceptible tumour reached quite to the umbilicus, and was broad in proportion.

It appears to me that the omentum afforded considerable support to the placenta to which it was adherent, and that it possibly prevented the early hæmorrhages, which occurred from December 24th onwards, from becoming excessive. These hæmorrhages appear to have been oozing more than the rupture of any vessels of size, or the case would probably have been fatal at an earlier date.

On considering the results which followed the lifting up of the omentum, it appears to me that it would have been perhaps better to have tried to separate the omentum vertically, tying any of its vessels which were divided in the process. The upper part of the cyst beyond the edge of the placenta might in this way have been reached, though this is doubtful as the edge of the placenta dipped down well towards the spine and reached as high as the umbilicus. There would also have been the additional disadvantage of having to work through a small hole in the omentum, and hæmorrhage occurring would have been harder to restrain with sponges. The advantage would have been the less disturbance of the relations of and adhesions to the placenta. The aspiration through the placenta was a mistake, as the puncture made by the fine trocar did not collapse, on the contrary gaped and tore and gave rise to profuse hæmorrhage.

I had not the courage to cut boldly through the presenting placenta, as recommended by Greig Smith, of Bristol, nor had I available the large pressure forceps with which he says the cut edges of the placenta must be seized if such a step is taken. Indeed, it seemed to me that such a procedure would be followed by necessarily and immediate fatal hæmorrhage, as the free edge of the placenta was only defined after much blood had already been lost. The placenta, too, was so friable that pressure forceps would have only crumbled it away and would not have held. Had the omentum been short of ordinary length, and not covering the cyst wholly, I think the operation would have afforded a reasonable chance of success.

I shall be very glad if any of the Fellows of the Society will point out the mistakes made during the operation, and offer any suggestion as to what would have been a more proper course to pursue in such a case.

The left appendages were examined during the operation and found to be quite healthy. No post-mortem examination could be obtained, the husband firmly refusing to allow any examination of the body.

Dr. EDIS said that it was through him that this paper had been brought before the Society, and he thought it was very important that so circumstantial an account of so interesting a case should not be lost. He said they had still much to learn in regard to this subject. In a case he had brought before the Society some time since, the difficulty in coming to a conclusion that it was a case of extra-uterine gestation was very clearly shown. He said that when the significance of these symptoms was more generally recognised, they would not have to deplore that so often the operation was undertaken too late. In this particular case it was not until after several attacks that Dr. Joubert had had an opportunity of doing what evidently ought to have been done much earlier. Hæmatocele might, of course, arise from a variety of conditions, but according to the opinion of eminent authorities, the most frequent cause was ectopic pregnancy. He contended

that in all cases where the symptoms were sufficient to justify attention being directed to the patient's condition, the idea of extra-uterine gestation ought at once to be entertained, before waiting for the patient to become collapsed. It was not even necessary to be quite sure that it was a case of extra-uterine gestation. It might be a case of pyo-salpinx with leakage into the peritoneal cavity and consecutive inflammatory mischief, and it was always justifiable to explore. He said he was certain that if more attention was directed to this subject by practitioners, and if their eyes were opened to the frequency with which these cases occurred, they would earlier have recourse to surgical interference, and a large number of cases thus be saved from an untimely end. He mentioned that the latest statistics by Mr. Lawson Tait, forty-two successes out of forty-four cases ought to encourage men to interfere earlier. One could not help sympathising with Professor Joubert at not having had an opportunity of dealing with this case at an earlier period of its history, as it would then, in all probability, have yielded much more satisfactory results.

Dr. BANTOCK echoed the sentiment that the Society was very much indebted to Dr. Joubert for the history of his interesting case. He was afraid that Dr. Edis would not find that condition of things which he was so much in search of, viz., that general practitioners would be found to recognise this condition when it occurs, or when the symptoms were of an urgent character, be prepared to operate on suspicion. He said that the more he saw of abdominal surgery the more was he convinced that abdominal surgery should be left to those who had had special training for the work. It would be too much to expect a man living in distant parts of the country with no opportunity of perfecting himself in abdominal work. They might regret that these cases were not diagnosed earlier and submitted to operation, but they were not in the position to lay the blame on anybody's shoulders. When the patient came under the notice of Dr. Joubert, she came for the first time under the notice of a man who was competent to open the abdomen on suspicion. It appeared that Dr. Joubert had

formed a perfectly correct diagnosis, and the history to his mind was very clear. First cessation of menstruation, then the occurrence of symptoms so characteristic of rupture of an ectopic gestation, then at the end of thirteen or fourteen weeks, expulsion of a cast from the uterus which might be taken as very strong proof of extra-uterine gestation when associated with the presence of a tumour in the lower abdomen. The circumstances were not such as to warrant interference by a man not skilled in such cases. It was to be regretted that it did not fall earlier under the care of one competent to interfere. It was much to be regretted also that no *post-mortem* examination had been obtained, as it would have cleared up many points which were at present somewhat obscure. He said it was not clear from the description that the placenta was still within the ectopic cyst. It looked almost as if the placenta had become extruded to some extent. Dr. Joubert said that the moment the presenting placenta was punctured it began to gape and that was hardly possible if still covered by peritoneum, because that would resist the tendency to gape of the placenta itself. If the placenta were still within the cavity he would not expect to find such adhesions to the omentum as were found, nor such hæmorrhage having occurred as was presented by the presence of fibrinous material, probably the result of past effusion of blood. He regretted that Dr. Joubert did not proceed further with the operation in separating the omentum so as to free as much as possible the cyst, and he thought it was unfortunate that he did not at least attempt to control the bleeding by applying a ligature to the cornu of the uterus and Fallopian tube. By that means he would at least have cut off a very large supply of blood from the cyst, and might have diminished the amount of blood lost, and so give the patient a further chance. All that, however, was conjectural, because they did not know the exact relations of the cyst, whether it was separate or not, &c.

Dr. FANCOURT BARNES said that if he had understood aright, Dr. Joubert was afraid to divide the placenta with a

knife, but he thought that there he was needlessly fearful. In a case of Porro's operation, on opening the uterus, he had come upon the placenta and divided it straight through. The bleeding was not serious, and he thought that as a matter of fact, when one came upon the placenta in that way it was safest to go right through it as in *placenta prævia*. He thought that if Dr. Joubert had done that he might have been able to control the hæmorrhage.

Laparotomy for Tubal Disease. Re-operation fourteen days after for Symptoms of Peritonitis and Intestinal Obstruction. By E. SINCLAIR STEVENSON, F.R.C.S., &c. (Fell. Gyn. Soc. and Obst. Soc. Lond., Corres. Fell. Edin. Obst. Soc.).

MRS. L—, æt. thirty-eight, five *para*, one miscarriage, has been suffering for fourteen years. She cannot remember exactly when she first began to suffer. She was under treatment in London for constant pelvic pains more than twelve years ago, and since that has been constantly ailing. She cannot lie down or sit down without great suffering, and has excruciating pains when her bowels are open. Six months ago, when in Kimberley, she became seriously ill with severe pelvic pains and hæmorrhage, which has continued ever since. Two months ago she was again laid up in Cape Town with same symptoms. Dr. Baird, of Cape Town, sent her to me.

On examination I found her suffering from disease of the right appendages, and advised operation, to which she readily consented.

On December 28th, 1888, assisted by Drs. Baird and Evans, the operation was done. On opening the peritoneal cavity, I found the right tube much enlarged and adherent to the uterus and surrounding parts. On trying to separate the tube it burst, and its contents, a clot the size of a small orange and dark blood, escaped in the cavity. On drawing

out the part I found the tube split longitudinally in its whole length, and the fimbriated extremity torn. This part was found closely adherent to a coil of intestine, its fimbriæ spread out covering a spot the size of a five-shilling piece and firmly adherent. Great care was required to remove this adhesion, and free oozing took place. The right ovary, which was cystic, burst on being pulled out and was tied and cut off. The left annexa were also removed. The cavity was well irrigated with hot water, and on account of free oozing a glass drainage tube was inserted. The patient recovered rapidly, and on the tenth day she felt well. The wound was well healed, and all the pains which she had suffered constantly from previous to the operation left her. On the eleventh day the patient committed an indiscretion and soon after felt worse, with vomiting, constipation, severe griping pains, tympanitis, pulse quick and hard, tongue dry, and general tenderness over the abdominal walls, constipation. The vomiting became very urgent, and on the fourteenth day after the operation Mrs. L. — appeared to be sinking. Feeling sure that I had to deal with peritonitis and intestinal obstruction I, in consultation with Drs. Baird and Evans, re-opened the abdomen. The wound was healed all through. At first it was found impossible to map out the parts; there was a general glueing of parts together. Fortunately the adhesions were recent and easily broken. The intestines were engorged and dilated, especially in the pelvic cavity, and in that region several soft fibrinous bands had to be torn. The large omentum, instead of floating on the surface of the intestines, was twisted like a loose rope and dipped into the abdominal cavity down to the spine. The whole of it was glued to coils of intestines, and was at its extremity firmly attached to a coil deeply seated. This adhesion required considerable force to free it. The whole part of the twisted omentum was ligatured and removed, and the cavity freely irrigated with a 1 inch 3,000 solution of corrosive sublimate and a drainage tube applied.

Six hours after the operation the bowels were moved by an enema of turpentine and hot water and a long rectal tube

was frequently passed in to allow the escape of flatus. Immediately after the operation all symptoms of obstruction and peritonitis left her, and she soon got over the shock of a second operation. The bowels were kept open daily by turpentine enemata. I must mention that after the first operation the same course was pursued with the exhibition of salines and the rectal tube was freely used.

Remarks.—The intestinal obstruction was due to the omental adhesions. The firm deep-seated adhesion was, I have no doubt, attached to the intestinal wall whereon the tube had been glued, and which at first accounted for the unbearable pain the patient felt when the bowels were relieved.

This case is very interesting, and demonstrated the rapidity of the formation of inflammatory bands in peritonitis, and how easily intestinal obstruction can take place after laparotomy.

Dr. EDIS alluded to one point which he said was of practical importance. The omentum appeared to have dipped down between the intestines and was adherent to the spine. His practice was invariably, after the abdominal operation, to lay out the omentum, carefully covering the intestines, and he thought this point was very important because it prevents the intestine coming into contact with the peritoneal aspect of the wound, and so becoming adherent. Moreover, it also prevented risks of the kind narrated. Either with a sponge on a holder, or by the aid of the fingers, the omentum should be spread out before commencing to do up the incision:

Dr. BANTOCK said that Dr. Stephenson was to be congratulated upon the successful result of his second operation. Dr. Edis had taken up a point which he himself was about to mention, viz., as to the importance of careful adjustment of the omentum after sewing up the wound. He said that it almost invariably happened that if the omentum was not kept back by a sponge placed over and somewhat below it, it was very apt to get down into the pelvis in the form of a loose rope. As he had always made it a rule to adjust the omentum before closing the wound he had frequently had the oppor-

tunity of finding this cord-like form as the result of the inevitable manipulations. For that reason he was very careful to prevent its getting down into the pelvis. For that purpose he was in the habit of using his fingers alone, and he preferred them to the sponge. He crowded up the omentum, which was in some cases very large, as near to the tranverse colon as possible. He said that this case particularly well illustrated the value of the method, and particularly the use of the drainage tube, but he did not think that they would be wise in following the example of using such a powerful substance as corrosive sublimate, even in dilute solutions. Some patients were peculiarly susceptible to the effects of mercurial poisoning. Even the injection of a very weak solution into the cavity of the uterus, in which it was scarcely possible for much to be left behind, had been followed in certain cases by a fatal result; and in such a part of the body as the peritoneal cavity, where some was sure to be left behind, he thought that it would be unwise to have recourse to such a dangerous substance when they had in plain pure water a simple and efficient agent.

Dr. BEDFORD FENWICK said the spreading out of the omentum was a very important point. He recalled that some few meetings ago he had propounded the theory that cases of fæcal fistula might be due to this agglutination of the intestines to the closing abdominal wound. These fistulæ occurred without any evident cause for ulceration, and the only explanation that seemed to cover all the ground would be something of that kind. He observed that the Society had great reason to congratulate itself upon the fact that in the course of one evening's proceedings they should have been favoured with papers from Fellows of the Society living as far away as India on the one hand, and the Cape of Good Hope on the other. That afforded clear and undisputable evidence of the utility and *raison d'être* of the Society, and he thought that the fact merited to be widely known.

Dr. FANCOURT BARNES mentioned that it was very often impossible in the course of an abdominal operation to avoid lacerating the omentum either by the tumour or by manipu-

lations which were inevitable, sometimes by instruments. It was always his practice, when he came across a piece of lacerated omentum, to apply a ligature and remove it. It did no harm to the patient, and they removed a possible source of trouble. He agreed as to the danger of corrosive sublimate. He had viewed it with suspicion when it was first introduced into midwifery practice, and he had since come across several recorded cases of death from the introduction of sublimate solutions into the uterine cavity. He asked why they should throw up carbolic acid, which had been proved to be safe and useful, to take up with a dangerous remedy like corrosive sublimate. He thought it would be far better to leave antiseptics alone altogether than to introduce an additional danger.

Dr. BARNES demurred to the idea that carbolic acid was to be regarded as completely innocuous. He had himself seen severe symptoms of poisoning follow its use. He mentioned a case in which after the removal of a tumour his house surgeon had, unknown to him, washed out the cavity with carbolic acid, and that patient undoubtedly died from carbolic acid poisoning. He thoroughly endorsed Dr. Bantock's remarks as to pure water being the best and most harmless agent to use for irrigation purposes.

Dr. R. T. SMITH said he had looked carefully through the paper to see if morphine had been used, because he was convinced that the brilliant results now obtained in abdominal surgery were to some extent to be attributed to the fact that opium and its alkaloids were no longer given as a routine treatment after operations. Patients were very much better when they were kept without morphia. He remembered seeing a post-mortem examination of a case very much like this one. The omentum was quite fixed to some of the pelvic viscera, and was drawn down just as described in the paper.

Dr. BANTOCK expressed satisfaction that the views that Mr. Lawson Tait and himself had held for a considerable time had begun to be generally recognised. They had both come separately to the conclusion that the use of opium as a routine

treatment after any operation was a mistake. They found that not only did the patients recover in larger numbers, but they made a better recovery. By not using it they avoided the dangers incidental to its use when the kidneys were diseased. He said that most patients could bear the pain, which was not so very severe, even after the most trying operations—such as hysterectomy—perfectly well for a few hours, and at the end of that time the pain subsided, and the patients were spared the unpleasant after-effects of opium. He said it was after witnessing the death of a patient a few minutes after the injection of some morphia that he had made up his mind to do without it whenever possible. That patient did not appear at all likely to die—at any rate for a day or two. It was not the first injection, but after some days, when the morphia had been repeated two or three times a day, suddenly the fatal result had supervened. He pointed out this curious fact, that if one began to give morphia they had to continue giving it, because the moment they dropped it the pain returned, whereas if none were given, after a time the pain passed off, and did not return. He wished to impress this upon Fellows of the Society, that it was important to withhold the administration of opium in any form after an operation. He felt sure that greater success would attend their practice, and the patient would be far more comfortable without it.

Dr. PURCELL recalled one of his earlier cases of abdominal section for fibroid of the uterus, in which the patient had borne the operation very satisfactorily, but in the evening she complained of pain, and was given a quarter of a grain of morphia by the house surgeon. In due course the patient went under the influence of the morphia, and he was sent for, but she never rallied, and undoubtedly died from the effects of the quarter of a grain of morphia.

The Society then adjourned.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 8, 1889.

A. V. MACAN, M.B., PRESIDENT, IN THE CHAIR.

PRESENT : 31 Fellows, 4 Visitors.

The following were elected Fellows of the Society :—Dr. J. O. Closs ; Dr. H. W. Maunsell ; Dr. J. de Zouche.

The following were proposed for the Fellowship :—E. Mellor Light, M.B., London ; Ralph Worral, M.D., Sydney ; Godfrey Forrest Reid, M.D., Orange Free State.

The SECRETARY read the report of the sub-committee appointed to examine and report upon various specimens.

On the motion of Dr. BANTOCK the reports were received and adopted.

“CASE I.—Received April 10th, 1889.

“Mrs. M., aged thirty-two; operation, March 22nd, 1889.—This specimen consists of the right uterine appendage; the ovary, fallopian tube, and parovarium being present.

“The ovary is normal in size; its surface is puckered, but is otherwise normal. On section one or two small follicular cysts are seen, and the scars of former corpora lutea are present.

“The parovarium is thickened and œdematous, but otherwise normal. The fallopian tube is nine centimetres in length, and about two centimetres in depth, but this second measurement is not uniform throughout, owing to the presence in the tube of five nodular thickenings, which vary from one to two centimetres in length, and are continuous with each other. The lumen of the tube is completely occluded, except in the middle third of its course, where it is patent for one

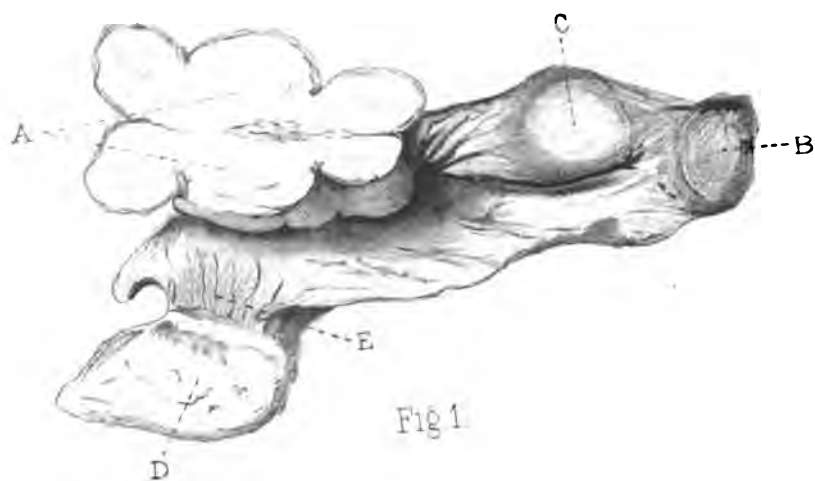


Fig. 2.

John. Baile & Sons, lith

EXPLANATION TO PLATE.

PRIMARY TUBERCULAR SALPINGITIS.

FIG. I.

- A. Tumours of tube divided to show interior ; lower half turned down to expose cut surface.
- B. Fimbriated extremity closed and nodular.
- C. Tumour not divided as at A. Shows peritoneal coat.
- D. Ovary, with puckered surface. Not tubercular.
- E. Parovarium, with tubes well marked.

FIG. II.

- A. Giant cell with nuclei.
- B. Lymphoid cells and inflammatory cells lying in a very delicate, almost retiform, basis.
- C. Muscular tissue breaking down. The nuclei are cloudy. Small round cells, probably inflammatory in origin, are seen between the muscular fibres.

centimetre in length. On opening this portion a few drops of yellow creamy pus escaped (fig. 1).

"On dividing the tube horizontally, and exposing the centre of the growths, a white glistening appearance is seen, very similar to that seen in making sections of a fibroma. The only exception to this is the last nodule at the fimbriated extremity of the tube, where the appearance resembles more the axle and spokes of a wheel. This radiating appearance is due to the fimbriæ, which have become inverted and adherent.

"Microscopical Examination.—Sections of three tumours were made for microscopical purposes—(1) the tumour at the uterine end of the tube; (2) the tumour in the middle third; (3) fimbriated extremity. Sections of all three tumours present very similar appearances, and a description of one will suffice for all. The changes were most marked in the middle third of the tube, the uterine end being least affected. The following description and microscopical drawing are from the tumour situated in the middle third of the tube (fig. 2).

"The peritoneal coat is hardly, if at all, thickened. Beneath the peritoneal coat are bundles of unstriped muscular tissue. Separating many of the muscular fibres are collections of small round cells, of inflammatory origin. In other places may be seen large collections of rounded or oval cells, in all stages of degeneration, the degenerative process being most marked towards the centre of the collections. In these collections may be seen typical tubercle follicles with the large branching giant-cell, with many nuclei in the centre, surrounded by small cells and larger lymphoid ones. Deeper down no muscular fibres are to be found, but in their places masses of small rounded cells, many of them cloudy and granular. No mucous membrane is to be seen, but its place is taken by rounded cells, slight connective tissue bases, and tubercle nodules. No tubercle bacilli were found.

"It will be seen, therefore, that the specimen is one of primary tubercular salpingitis; the disease probably starting in the mucous membrane of the tube.

"HEYWOOD SMITH.

"HENRY T. RUTHERFOORD."

"CASE II.—Received April 10th, 1889.

"E. B., aged twenty-four; operation, April 5th, 1889.—This specimen consists of two ovaries, both enlarged, and the seat of degenerative changes. Owing to the numerous adhesions which exist, and to the destruction of the normal state of the organs by cystic growths, it is impossible to decide definitely to which side of the pelvis each ovary belongs. Numerous thick adhesions are to be seen on their surface. The capsule is thickened. Both ovaries are enlarged by the presence of numerous cystic growths, which vary in size from that of a pea to that of a large walnut, and have for their contents either pale, clear, limpid fluid, or dark grumous material.

"No fallopian tubes are to be found, though careful search was made, and several likely structures examined microscopically.

"*Pathological Sub-Committee* { HEYWOOD SMITH.
HENRY T. RUTHERFOORD."

REPORT ON DR. GRANVILLE BANTOCK'S SPECIMEN.

"The specimen consists of the right and left uterine appendages, and was received on April 24th, 1889.

"The left fallopian tube and ovary are very intimately adherent to each other by firm adhesions. The uterine end of the tube is slightly thickened for about one inch in length and its lumen patent. At this point the lumen is completely closed, and the outer two-thirds of the tube is the seat of a thin walled cyst—hydrosalpinx—about the size of a Tangerine orange. The walls of this cyst are very thin and transparent, in places extremely so. Internally the cyst wall presents a smooth, glistening white appearance. The columnar ciliated epithelium normally lining the tube is replaced by a single layer of flattened cells, lying upon a basis of fibrous tissue. The muscular coat of the tube has disappeared entirely, except at one spot close to the ovary, and almost exactly opposite the undilated portion of the fallopian tube, where a small thin

layer of muscular tissue is present. Whether this portion of unstriped muscular tissue represents the fimbriæ of the tube it is difficult, if not impossible, to say, as the distension of the tube and the very great thinning of its walls has altered the relations and characteristics of the part.

"The ovary is normal in size; its capsule is everywhere thickened, and its surface slightly puckered. On section several small cysts, the size of peas, are seen.

"The right fallopian tube is intimately adherent at its fimbriated extremity to the right ovary. The lumen of this tube is completely occluded in the inner half of its course; but the outer half is patent, and somewhat dilated, and contained a small quantity of dark grumous material. The fimbriæ are inverted and adherent to each other, and completely close the abdominal end of the tube.

"The hydatid of Morgagni, which is unusually large, is two inches and a-half in length, and is surrounded by delicate but strong adhesions, which constrict its pedicle, and give it the appearance of a pedunculated cyst connected with the ovary. On careful dissection, however, of these adhesions, the pedicle of the cyst was traced up to and found directly continuous with one of the lower fimbriæ of the tube which has not become inverted with its fellows.

"The right ovary, after hardening in equal parts of methylated spirits and water, measures two inches in length and an inch and a-half in breadth. Numerous adhesions exist on its upper and outer surface, close to the fimbriated extremity of the tube; its capsule is otherwise smooth, but thickened. On section the substance of the ovary is deeply congested, and very friable, and is the seat of an irregularly-shaped blood-cyst, the size of an almond, with dark fluid contents. The ovary is, in fact, in a state of acute congestion, which state has most probably supervened upon an already-existing chronic inflammatory condition of the right appendage.

"HENRY T. RUTHERFOORD."

Dr. MANSELL-MOULLIN showed the uterine appendages removed from two patients within the preceding ten days. He

said the cases presented no great interest, but the specimens were remarkably good. The first patient was aged forty-nine, and was the mother of several children. For more than twelve months past she had complained of constant pains on defæcation. On examination, there was no difficulty in making out a tumour on the right side of the uterus, which was diagnosed, and, as the operation showed correctly so, as a dermoid tumour. It was the size of an egg. The appendages were also found to be diseased on the left side, the tube being occluded and distended with pus.

In the second case the operation was indicated on account of a large moveable tumour in the lower part of the abdomen, which proved to be a pedunculated cyst of the broad ligament. It was too large to see with precision from what part of the broad ligament it took its rise. It was very loosely attached to its capsule, and enucleation should have been easy. In this case also the appendages on the opposite side were found to be diseased. There was a small tumour of the ovary, the size of a walnut, the outer surface of which was covered with papillomatous growths. On opening the cyst it was found to be filled with a growth exactly similar to that on the outside. There was very little fluid, and what little there was was of a colloid nature. He thought at first that it was a ruptured cyst of the hilum, but it seemed to be a little adenoid tumour. The patient was about thirty years of age.

The PRESIDENT in reference to the first case asked whether the only symptom was pain, and how he was enabled to tell that the pain was due to pelvic trouble. He said that at her age one would have expected them to diminish.

Dr. MANSELL-MOULLIN said that pain on defæcation was the principal symptom. The menopause had taken place twelve months before. '

The PRESIDENT said he had understood that it was obvious that it was the pressure of the tumour upon the rectum which gave rise to the pain.

Dr. MANSELL-MOULLIN said he was unable to say as to this; he thought not, as the tumour was too high up.

Dr. HEYWOOD SMITH asked whether the pain was in the inguinal region or was of the nature of tenesmus.

Dr. BANTOCK said it was a remarkable fact that in cases of small dermoid cysts, the only sign or symptom they had to go by in deciding the question of operation was pain, and his own experience had shown him that the pain was often in inverse proportion to the size of the tumour; very often when they had to do with a dermoid tumour, the size of a cocoanut, which had become the seat of inflammatory mischief and contracted adhesions, there was very little pain, while in comparatively small ones the pain was out of all proportion to what they might expect. He mentioned a case in which the tumour was not larger than a walnut, which had been the cause of a very great deal of pain for many years. She had passed the menopause by several years and was the mother of several children. The pain in that case was effectually relieved by removal of this small tumour. During the preceding week he had removed a small dermoid cyst the size of a hen's egg. There were no adhesions, the cyst was quite free, but the pain had been the characteristic feature. He experienced some difficulty in persuading the patient and himself that an operation in a woman who was past the menopause was an absolute necessity. He could not say exactly what the tumour was, but he thought that whatever it was it ought to be taken away. The cyst contained a quantity of hair, fat, and bony tissue. For years the patient had been subject to pain, for which she could obtain no relief, and he said he knew of no other symptom beyond the pain which could serve as a guide to the necessity for an operation in such cases.

Mr. LAWSON TAIT insisted upon the extraordinary amount of pain to which these tumours gave rise, and said that his own experience confirmed the assertion that the pain was inversely to the size of the tumour. He said there was a distinct class of dermoid tumour, not larger than a hen's egg, in which pain was the sole justification for operation. He studied many of these cases as relics of the old days when no abdominal operation was considered permissible; they

had to consider the relief of pain as well as the saving of life, and these cases therefore, came within their competence. He recalled one of these cases which had been the source of great profit and ingenuity in the invention of pessaries, which, however, afforded no relief; he was subsequently called upon, and removed a small dermoid tumour, which had been mistaken for a retroflected uterus, and the pain had not recurred.

Dr. BARNES said that some years ago he had brought a similar case before the Society. It was a small dermoid cyst just about the size of those exhibited, and he explained at that time how it caused pain. Being low down in Douglas's pouch, there was little space for it; when there the pressure bore upon all the surrounding organs and nerves, becoming larger and rising out of the pelvis, they cease to cause the pain because pressure is removed.

The PRESIDENT said that last week he had removed a small ovarian tumour which he had ventured to diagnose as being probably dermoid, on account of the pain, but it resembled Dr. Smith's second specimen. He thought that tension in the cyst, must be the cause of the pain in some cases. First of all therefore, one ought to be careful to be able to connect the pain with some condition of the ovaries; he thought that was not always done before proceeding to their removal.

Dr. MANSELL-MOULLIN said that the specimen had contracted since the operation. There was no difficulty in recognising the dermoid tumour prior to operation. It was a very interesting question as to how the extreme pain was caused. With reference to Dr. Barnes' explanation that the pain was caused by the tumour falling down into the pelvis and pressing upon neighbouring organs, he pointed out that it was a curious fact that the pain was more marked the smaller the growth; he thought that it might be due to tension in the ovary, just as pain was due to tension in orchitis. If this were the case the pain would necessarily be greatly intensified by the act of defæcation, or anything which caused the neighbouring organs to press upon the tumour.

SECOND SPECIMEN.

Dr. BANTOCK said he presumed it was a parovarian cyst, and he had come to that conclusion because of the facility with which the cyst wall proper could be separated from its envelope. He said he had always been under the impression that a clear limpid fluid of low specific gravity was characteristic of parovarian cysts, but that very day he had disabused his mind of that opinion in a very forcible manner. He had removed an ovarian cyst that afternoon, and when he saw the fluid, he had ventured to say that it was probably parovarian. The fluid, however, presented this difference, that while parovarian fluid yields no precipitate on boiling and adding nitric acid, the fluid in question remained clear; he had put the matter to the test and his opinion was rudely overthrown, for it presented all the characteristics of parovarian fluid. The sp. gr. was 1005, no perceptible deposit on boiling and adding nitric acid, so that the condition of the fluid removed from the cyst, could not be regarded as yielding very positive indication of the nature of the cyst.

The PRESIDENT asked whether it was a single cyst.

Dr. BANTOCK said it was single but evidently ovarian, for there were ovarian follicles all over the cyst wall, and careful examination showed that it was quite distinct from the parovarian.

Dr. RUTHERFOORD said the second case was a typical example of papillomatous growth. It could be seen growing up towards the broad ligament and into the ovaries itself, as a small cyst, just starting and growing very close to the pelvic growth. With regard to the case mentioned by Dr. Bantock, a further point which proved that it was not a parovarian growth, was that the whole parovarium could be seen when the growth was held up to the light.

Dr. R. T. SMITH asked whether the peritoneum was infected, and as to whether there was any ascites.

Dr. MANSELL-MOULLIN, in reply, said that the fact of its being pedunculated was rather against it being a cyst

of the parovarium, since these were usually sessile ; he did not think that any test applied to its contents would ever prove of practical value in determining one variety from the other. With regard to the other ovary, he said it was a papillomatous cyst at first, but the growths on the inside of the ovary were covered with a colloid material which was not usual in papillary cysts ; there had been no ascites and the peritoneum was not infected in any way, a fact which would also tell against its being a papillomatous growth, he thought that a good deal of work remained to be done in the elucidation of this subject.

Dr. MURPHY, of Sunderland, showed a uterus which he had removed three or four months ago from a woman during labour at full term. She had been in labour for four days without any progress being effected, owing to the pathological condition of the cervix. She was a married woman, thirty-five years of age, the mother of four children. Labour commenced on Sunday, Dec. 9th. She was attended by a midwife, and labour went on from Sunday until Wednesday, with pain and hæmorrhage the whole time. On the Wednesday she was getting exhausted, and a friend of his was called in. He recognised the condition of affairs, and asked him to see the patient. He found the patient very exhausted. The vagina was healthy, and the disease was confined to the cervix. The whole of this, however, was a mass of cancer, and the os uteri was about the size of one's finger. Under those circumstances they had to consider what was the best thing to do. He said he might have performed Porro's operation, or a Cæsarian section, or simply incise. At eleven p.m. he had the assistance and advice of his colleagues, and they agreed to remove the uterus. He therefore opened the abdomen, after making a very careful examination. There were no signs of the foetus being alive. This being the case he determined to open the uterus only after removal. He then ligatured the broad ligaments on each side, and made a transverse incision right across the uterus, picking up the bleeding vessels with pressure forceps. In the course of doing so the right ureter

was seen and recognised. This being done, he cut out the uterus with scissors. The forceps were then removed one at a time, and the bleeding vessels secured. The abdomen was then carefully flushed out, and a drainage tube inserted. The patient was very much exhausted, but rallied from the operation. The next day the pulse was 110, the temperature was normal, and during the day she did very well. During the succeeding night, however, she fell off, and on the third day after the operation she died. He said that he brought the specimen before the Society for his own instruction. He wished to know whether he was justified in removing the uterus under those circumstances, and whether he had gone the right way to work. He especially wished to know how he should have dealt with the opening into the vagina. He had left it open because it was so exceedingly small, and gave no inconvenience afterwards. At the *post mortem* everything was perfectly clean and sweet, and he supposed that the patient had died of exhaustion.

Dr. EDIS asked for more precise information as to what was removed, and as to how he dealt with the hole in the vagina?

Mr. BOWREMAN JESSETT asked whether the existence of cancer had been proved by microscopic examination.

Mr. LAWSON TAIT said that ten days ago he had a similar case. The only doubt was as to whether the uterus was not so fixed as to include the diseased cervix along with the body of the uterus. He had begun the operation in the belief that he could move it, but he found the uterus so fixed to the pelvis, together with a mass of enlarged glands, that they did nothing beyond amputating the uterus for the sake of the child, otherwise he would have done the same as Dr. Murphy had done. He would not have closed the vaginal opening. He said he had treated a case in that way in which he had removed the whole of the uterus by accident. The only thing he would have done would have been to put a drainage tube in. His patient only died that morning. She sank from bleeding, and the discharge from a mass that he had to leave.

Dr. FANCOURT BARNES said the real point in the case was the diagnosis. Provided they made a correct diagnosis he did not see that there was anything else to be done than what had been done by Dr. Murphy. He said that, of course, he always sewed up the peritoneum afterwards, which Dr. Murphy did not do. He did not wish to say that he thought it mattered very much whether the peritoneum was closed or not. Looking at the specimen he said he could not see any signs of cancer, and that was the burning question suggested by the specimen as to diagnosis.

Dr. ROUTH asked whether he had properly understood that only the cervix was affected, and that the part immediately above was unaffected. He said that a great number of years ago, when he was attending the Vienna hospital, he had seen a case that very much resembled this one. It was supposed to be one of cancer, and the patient was taken in labour and suffered intense pain. The force of the contractions of the uterus to expel the child at last detached a portion of the cervix, and the moment that took place the remaining portion dilated very well, and the child was soon delivered. He said he did not know in such a case, whether it would not have been easier under all the circumstances to have cut off first the cervix by means of the ecraseur, and then the uterus might have opened sufficiently to allow the child to pass.

Mr. PURCELL said that it suggested itself to him whether it would not have been well to incise the os uteri and endeavour to deliver *per vaginam*. Speaking on the method of operation, he would have suggested as a preliminary to the laparotomy, that the peritoneum should have been entered *per vaginam*, and that the lower uterine arteries should have been first tied. If they entered the peritoneum through Douglas's pouch first, before making the abdominal incision, the vessels that gave the most trouble in the performance of this operation were the lower uterine vessels, which were very difficult to secure, whereas, if secured, as in vaginal hysterectomy, they were made secure at the first start off. They could then free the cervix and enter the abdomen anterior to the uterus, completing the operation by abdominal section.

Dr. BANTOCK said that the method suggested by Dr. Purcell was the latest modification of Porro's operation. It was, however, much more easy to talk about securing the lower uterine arteries, than to do it. He thought that if an attempt were made in a pregnant woman, it would be found not to be so easy as was imagined. He said it was much better to wait until they cut into the abdomen, where they had full command of them.

The PRESIDENT said, that one did not see any great mass of cancer in the cervix, but of course the death of the child practically turned the scale. Another point was, that unless there was a chance of removing the whole of the disease there was no object in risking the patient's life. He asked why the child was not removed by the vagina. They might have perforated the child, and, unless the whole of the disease could be removed, the operation was no good to the woman. With respect to the proposal to sew up the peritoneum in these cases, he could not help thinking that it was better than sticking in a drainage tube. If they disinfected the peritoneum and sewed it up, it was done with, and was safe. He did not think that the drainage tube had killed the woman in the present case, because of the antiseptic precautions.

Dr. MURPHY in reply said, in reference to the question of diagnosis, that when he came to the case there was a history of four days' labour, the hæmorrhage was almost continuous, and the patient was very exhausted. He did not care very much whether it was cancer, or what it was, the surgeon often had to operate first and make his diagnosis afterwards; it had however been examined and found to be cancer. He said, that unfortunately, he had not explained very clearly the steps of the operation, but as a matter of fact he did not put the drainage tube right there. He used two, one glass and the other rubber. He failed to see that there was any great advantage in attacking the peritoneum from the vagina beforehand. He never had the slightest difficulty in securing the vessels through the abdomen. He said the disease was

confined to the cervix, it did not attack the vagina, otherwise he would have done a Porro's. It was a case of diseased cervix, and if he had saved his patient, the whole disease might have been cured ; under such circumstances, he said he would not be guided by the life or otherwise of the child.

Dr. RUTHERFOORD read the notes of the case of a woman, aged thirty-six, the mother of six children, no miscarriages, the last child being a year old. Two years before that, she noticed an abdominal tumour, this was allowed to grow slowly until she became pregnant. At about the third month she suffered from symptoms of collapse, pain in the abdomen, &c. She got over the rupture, and went on to term, and had a natural easy labour. After her confinement she began to suffer from pain, and she then noticed that the tumour was rapidly increasing in size. She came to the Chelsea Hospital for Women for treatment three months later. At that time she had a fluctuating tumour behind the ensiform cartilage. Nothing very definite could be made out per vaginam, the uterus was drawn up, and to one side. He operated upon her and found an enormous number of adhesions. The whole of the anterior wall of the abdomen was adherent to the front of the tumour, and was separated with great difficulty. He managed to free it, however, and also some which bound it to the liver, intestines, and fundus of the uterus ; he then washed out the cavity and put in a drainage tube. The patient made an uninterrupted recovery, and the drainage tube was taken out on the ninth day. The interesting point was the fact of the tumour having been noticed before pregnancy, rupture at three months, and the perfect recovery notwithstanding numerous adhesions.

The PRESIDENT said that the case seemed to show the traumatic effect of pregnancy upon an ovarian tumour.

On the Tolerance of Morphia in Cases of Abdominal Section.

By Dr. CASE.

I will make no excuse for offering this short report of a case which occurred in my practice in September, 1887, except

that it was one of more than ordinary interest to me, and I thought might possibly not be without interest to others.

The patient, a German woman, sixty-two years of age, the mother of three children, the youngest born when the mother was thirty-nine years old; the menses had stopped at the age of forty-six and her record for good health all her life up to sixty-one, is not often paralleled. The latter part of the year 1886, she first noticed a slight enlargement in the left side which gave her considerable pain, and caused her to be "very nervous," as she expressed it. The tumour enlarged very slowly, but the pain in the side was surely increasing every day, until she decided to seek medical advice. I was called the first of September, 1887, and after a careful examination I diagnosed ovarian tumour, the exact nature of which I could not clearly make out. I advised an operation with a view to removal, but could not get the consent of the patient. About five o'clock, p.m. on September 26th, 1887, after a day of unusual suffering, she was suddenly attacked with almost complete paralysis of the left side, with of course, entire cessation of pain. About one hour after the attack, the sensation began to return in the affected side, and with it, the old pain, only more severe, and six hours after the paralytic attack, the pain had become so severe that the patient was screaming with every breath, and she constantly avowed that the lump in the side was the cause of the whole trouble, and begged with all earnestness that I should operate for the removal of the tumour at once. I tried to control the pain by using electricity; not succeeding, I then tried a hot bath, followed by an ether spray to the spine, the skin had become so sensitive by this time, that she could not possibly bear to be sponged down, or even dried with a soft towel, the slightest touch causing a shock and severe pain; this extreme sensitiveness of the surface, included the whole of the left side, from the top of the head down; and now comes, to me, the interesting part of the peculiarity or perhaps I had better say, the idiosyncrasy of this case. It was now twelve hours after the attack and other means having failed to control or even alle-

viate the pain, I injected one-fourth of a grain of morphia in the arm and repeated the dose in forty minutes after, without the least beneficial result. The patient was by this time very much prostrated, the pulse beating 160 per minute and respirations 30, temperature 99 only, and as the patient and friends all urged me to operate, I did so, I gave chloroform and opened into the abdominal cavity, fifteen hours after the attack or paralytic shock. I found a cystic ovary in the left side about the size of a large orange which was removed with comparative ease, as the pedicle was long and easily tied, and no adhesions. The right ovary was atrophied, but otherwise healthy; not finding anything else abnormal, the abdomen was closed in the usual way and a pad of iodoform gauze and bandage applied. The pain came back with the return of consciousness, only more severe if possible, and the only thing that I could do was to keep the patient under the influence of the anæsthetic, which I kept up for ten hours, and then, as I was getting pretty tired myself, I determined to try the morphia again, and injected one-half grain into the right arm and repeated the dose in forty minutes, and as the pain did not subside after waiting one and a-half hours, I injected one grain, and two hours afterwards, two grains, and then for the first time, the narcotic effect was slightly perceptible; this amount, two grains, was given every two hours, for four times more, with a gradual diminution of pain, and after this the amount was reduced to one grain every three hours, for two days, when the pain ceased, and although the patient was extremely weak she gradually recovered, and twelve days after the operation, she said that she could get up and go to work as well as not, and twenty days after the operation she was allowed to sit up, and soon afterwards she was as well as ever she was, so she said, and to look at her, one could not doubt the truth of the statement. She remained in perfect health until December, 1888, when she had another paralytic attack and died immediately.

It is fair for me to say that the patient had never taken opiates of any kind before this, and also that the drug used

was a pure article and produced the desired effect as a narcotic when testing it afterwards.

Now I would like to ask what other plan could have been adopted to relieve this patient of the extreme pain, with a probability of giving better results, with less risk, than such heroic administration of morphia, and also whether any of the members of this Society have had patients that required such large quantities of opiate to control pain. I will add that it was quite evident to me that the tumour was not the real cause of the extreme pain, and that the patient's positive impression (which ordinarily has considerable weight in many cases) with reference to this was erroneous.

Now my object in bringing this report before the Society is not so much for this individual case, though to me an interesting one, as it is to get your views with reference to the use of morphia or opiates of some kind in the immediate after treatment of abdominal operations, especially operations into the peritoneal cavity. Is there harm wrought the patient in the administration of narcotics. Does not the rest, and sleep, and absence of pain, which is insured most patients by the intelligent use of opiates, more than compensate for the risk (if there is any) in administering opiates. Is it not better practice than to let the patient suffer, when we have at our command that which will relieve them. And is it not an important duty of ours, as physicians, to control pain, as well as to cause pain in our heroic surgical operations.

Dr. BANTOCK said he would not criticise the case in any way, but as Dr. Case had asked for an expression of opinion with regard to the use of opium after operations, he would answer the question. He said he fixed the date from recollection when he had discontinued the use of opiates after operations, probably some three or four years ago. Previously he had been in the habit of following the routine treatment which he had been taught, of administering a sedative after an operation, usually a sixth of a grain of morphia hypodermically, sometimes twenty minims of tincture of opium repeated in the course of a few hours, and continued for several days

according to the amount of pain complained of; he had followed that plan simply because he thought it his duty to relieve pain. At about that time he had a patient who was very bad after abdominal section. He had no hope of her recovery, and he was anxious to relieve her. There was, however, nothing to lead one to expect that she was likely to die shortly. She had been having morphia administered at intervals, and as she had complained of considerable pain on his visit he administered a sixth of a grain of morphia, and she died within five minutes, and he confessed he was considerably horrified. He then said to his nurses, this shall not happen again, and they reduced the dose to a twelfth, and the nurse agreed with him that the patients did better since the dose was reduced. Then he left it off altogether. He therefore gave it as the result of his experience that patients were very much better without opium or morphia than with it; they escaped the restlessness which was left as the effects of the opium wore off. He said that if there was one thing more calculated than another to make one feel wretched it was that restlessness. It was easy to say that it was their duty to relieve pain, but they must ask themselves whether it was for the good of the patient that they should relieve them without reference to the future; and he would affirm, with every confidence, that it was very much better to allow the patients to recover from the anæsthetic, and encourage them to bear the pain for a few hours, for the pain will pass off and not recur, and the patient is free from the unpleasant after-effects and makes a better recovery.

Dr. HEYWOOD SMITH corroborated all that Dr. Bantock had said as to the disadvantage of giving opium after operations, and especially after abdominal section. He remembered a case of abdominal section for ovariectomy in a lady, not very young, and the sister-in-charge gave a quarter of a grain of morphia, and without any very apparent reason the patient died. With regard to the amount he had seen given, he mentioned a case in which six grains were given four times in the twenty-four hours, and with very little relief to the pain.

Dr. BEDFORD FENWICK said that ever since he had begun to watch abdominal sections, he had felt convinced that if there was one thing more silly than another it was to give opium. He said that, not only as a matter of theory, but as the result of experience. Some years ago he asked why opium was given, and he ventured to say that what they wanted to do after abdominal section was to get the patient well, therefore to get the patient's kidneys to act, otherwise she would not get well; also to get the bowels to act, or at all events to relieve the bowels of flatus. If they gave opium they increased the congestion of the kidneys to a dangerous extent, and it might even go on to suppression of urine. They caused complete atony, or paralysis of the muscular tissue of the intestines, and thus prevented them acting. These were all weighty practical reasons, and since opium had been less used after abdominal operations, the results had been infinitely better than before. Then as to the action of opium on the heart; he said that pain was one of the most powerful agents in exciting the heart to action, and if they enabled the patient to disregard the pain, the action of the heart was very much more likely to cease, and the patient was very much less likely to recover, and for that reason a certain amount of pain was positively desirable; it would keep the heart going even when the disease had so much affected it as to cause grave degeneration of its tissue. As the heart was often very much degenerated in abdominal cases, he was convinced that they often did serious harm in giving opium and its alkaloids.

Dr. R. T. SMITH said he was attending a case of very severe shingles, where he gave two doses of a quarter of a grain of morphia, and the patient passed no urine for twenty-four hours. So much for its action on the kidneys. He asked Dr. Case whether his patient was suffering from abdominal aneurism. He remembered a case six years ago of a gentleman with aneurism of the chest, where morphia utterly failed to relieve the pain, and students had to go down in relays to administer chloroform.

The PRESIDENT said that if a woman got peritonitis it would be impossible to avoid giving opium, and the indications were the same in an ordinary case of colic. He said it could do no harm. He quite disagreed with the opinions that had been expressed, and he always gave it and his patients got well, whether their kidneys acted or whether they did not. The question as to quantity was much more important. He had heard it quoted that 1,600 grains of morphia had been given in a week. He did not think that it was possible to give too much in some cases, and if the patient were unaffected by large quantities of opium it was a sign that she had peritonitis. He said that he had never seen any bad results follow the use of morphia.

Dr. CASE, in reply, said he did not detect anything abnormal at the time of the operation. Since he had left he had heard that the patient had died suddenly. He did not know on which side the second paralytic seizure was. He said that as a railway surgeon in the States he had a good deal of experience in the administration of morphia after accidents. He never failed to give an opiate. It never occurred to him not to give it, and he had never had any trouble with the kidneys.

The Society then adjourned.

On Perinæorrhaphy by the Method of Lawson Tait. By FANCOURT BARNES, M.D., M.R.C.P., Physician to the Chelsea Hospital for Women, Senior Physician to the British Lying-in Hospital.

It is now four years since I first resorted to Mr. Lawson Tait's method of restoring ruptured perinæums by "flap-splitting." From the first, the operation gave such satisfactory results that I have treated every case which has come under my care by this method. The operation is difficult to describe; it should be seen. It consists in splitting the recto-vaginal septum and the torn portions of the perinæum up each side of the vulvar orifice with scissors, and then bringing the parts together by sutures. No tissue is removed, so that if union does not take place, the patient is in no way the worse, and the conditions are as good as before, for a new operation. The old plan of paring away the mucous membrane of the vagina is most unscientific, as each time the operation fails the patient loses some vaginal tissue, until in some cases I have seen most of the posterior vaginal wall has disappeared. In several such cases I have been able to completely restore the perinæum by Lawson Tait's method. Since I have been using this method, various surgeons have been present at my operations, and the consensus of opinion has been that it is a great improvement on the old paring plan. Sir Spencer Wells, who has been present on two occasions, said it was a great improvement on the old method. I feel sure that medical men who have only seen the results of the old

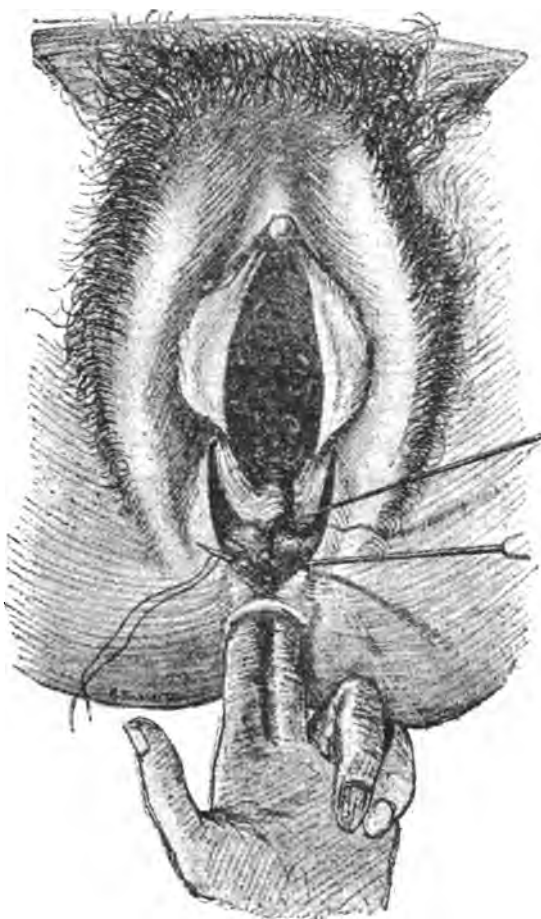
operation, naturally hesitate to advise perinæorrhaphy in cases of lacerated perinæum, because they know that it is always possible that the patient may be in a worse condition after



Shews the arrangement of the splitting by the scissors to form the H incision.

the operation than before. *This can never be the case in Lawson Tail's method.* The following drawings made by my

friend Professor Vulliet, of Geneva, after seeing me do the operation, give a good idea of the several steps in the operation.

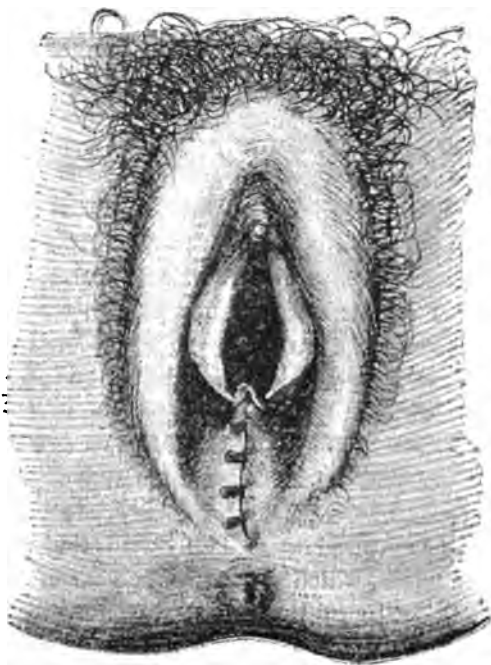


Shews the fingers in the rectum to guide the suture needle in its passage across the perinæum.

The following are some typical cases of the operation when undertaken for complete rupture through the sphincter.

Case I.—February 24th, 1885, R. H., age 20, married two years. Two children. Last pregnancy, October 16th, 1884.

Medical history.—Torn at first confinement, 1st August, 1883. Instrumental. Can retain motions when solid, when fluid they often run away. Leucorrhœa.



Shews the sutures in situ and wound closed up.

Present condition.—Complete absence of perinæal body, which had sloughed away. Perinæum torn throughout sphincter.

March 12th.—*Operation: ether.* Perinæum repaired in usual way.

18th.—Catamenia appeared.

22nd.—Catamenia ceased.

23rd.—All four sutures removed.

24th.—Bowels opened freely yesterday. Some pain.

April 8th.—Operation quite successful. Good perinæum, with control over sphincter.

Case II.—March 17th, 1885, S. W., age 44, married twenty years. General health good. No cough. No Rh. F. P. 84.

March 19th.—*Operating theatre; ether.* Perinæum found to be torn through sphincter ani; repaired in the way described.

23rd.—Has a good deal of pain about rectum, requires morphia, better this morning.

26th.—Bowels opened freely this morning, fluid, no straining.

28th.—*All stitches removed.*

30th.—No pain; to have purge to-night.

31st.—Some bleeding when bowels acted.

April 2nd.—Bowels acted without pain this morning.

6th.—Catamenia appeared.

7th.—Feels better. Union good, but not a long perinæum. Full control over sphincter.

Case III.—January 15th, 1886, M. D., age 25, married five years. Three children. Last pregnancy eighteen months ago. Four years ago, after first delivery, the perinæum was ruptured, and was sutured immediately with good result. After second confinement, which was within a year of the first, the perinæum was again ruptured, and was not treated. Since then the patient says the general bad effects have gradually increased. Bowels open regularly. Has no control over motions. On examination the perinæum is found lacerated through sphincter. Uterus bulky and hard; cervix lacerated.

January 19th.—Perinæum restored by the H incision. Sir Spencer Wells, who had previously seen me restore the perinæum by this method, was present and brought Professor Nicolaisen with him.

29th.—Perinæum appears to have healed well.

February 15th.—Perinæum firm, anus somewhat patulous, but patient has now perfect control over bowels.

Case V.—September 27th, M. A. L., age 22, single. One child. Last pregnancy two years ago.

Her first and only labour lasted fourteen hours. She was delivered by instruments. Was in bed three weeks afterwards; suffered much from weakness. Three months ago began to suffer from bearing-down pains, and burning pain in back, no control over bowels, frequent desire to pass water, burning pain on micturition and occasional cloudiness of urine. She soon noticed that something "came down" through the vulvar orifice, and the above-mentioned troubles all increased gradually.

Perinæum lacerated through sphincter ani.

October 8th.—Æther administered. Perinæorrhaphy performed by the flap-splitting.

17th.—Sutures removed, perinæum has healed well. She has perfect control over the bowels.

Case VI.—October 18th, 1816, S. B., age 25, married fourteen years. Two children. Last confinement three weeks ago.

After first pregnancy, thirteen years ago, first noticed some prolapse of uterus, getting gradually worse, had no treatment till three months ago; wore a ring pessary which caused considerable pain.

Perinæum ruptured partly through sphincter.

October 20th.—Uterus entirely prolapsed outside vulva.

21st.—*Operating theatre; ether.* Perinæum repaired.

31st.—Sutures removed.

November 12th.—Ring pessary inserted. Much relieved; uterus now inside the pelvis.

Case VII.—December 31st, 1886, N. H., age 31, married eight and a-half years. Two children. One abortion. Last pregnancy two years ago. Seven years ago had first child. Labour was short, but very large head for child. Perinæum was ruptured. About two years after was admitted to Soho Hospital, where she was treated for displacement of uterus.

For the last six months has suffered from leucorrhœa. Complains of pain in right inguinal region.

January 1st.—Perinæum lacerated. Sphincter gone, Recto-vaginal septum lacerated for about three-quarters of an inch.

Operating theatre ; ether. Perinæum repaired (Lawson Tait's method) four sutures.

January 4th.—Pain at epigastrium and right side of abdomen.

5th.—Period began on January 6th, losing more than usual.

12th.—Complains of pain in perinæum still ; says there is a good deal of discharge.

15th.—Complains of pain in stomach being worse, also of "bearing down" at rectum. Hardly slept at all last night.

18th.—Complaining much of pain at epigastrium.

22nd.—Has now a perinæum which is not, however, sufficiently thick. An ischio-rectal abscess has formed, which discharges by perinæal wound.

Case VII., second operation.—March 4th, 1887, N. H., age 32, married nine years. Two children. One abortion. Last pregnancy three years. Patient was in the Hospital a month ago, when Lawson Tait's operation was performed. She complains now of pain in back, hypogastric and pelvic region, worse when she lies on back or walks. Pain on since she was last in hospital, and constant desire.

March 5th.—Has now a very fair perinæum, the result of the last operation, but not sufficient.

Lawson Tait's operation again performed on the basis of the last operation.

15th.—Sutures removed, wound healed well.

23rd.—There is now a substantial solid perinæum about an inch in thickness.

Case VIII.—January 28th, 1887, age 25, married one and three-quarter years. Menstrual history ; regular, last period fourteen days ago. One child. Last pregnancy nine months.

Medical history.—Since birth of child has had bearing-

down pains, and no control over bowels. Perinæum was repaired six weeks after confinement by Dr. Westland, who sent her to me.

January 29th.—On examination, I found a fistulous opening leading from rectum through perinæum into vagina; perinæum had evidently been lacerated through sphincter, and a plastic operation performed, successful only in median portion.

31st.—*Operating theatre; ether.* Perinæum repaired.

February 4th.—Period began.

7th.—Period ceased.

9th.—Sutures removed. Union good.

Case IX.—January 17th, 1887, M. F., age 41, married nineteen years. Five children. Last pregnancy six and a half years. Has been ill "on and off" ever since last pregnancy. Was treated here by Dr. Robert Barnes last March when the cervix was cauterized, she says. Has again been sent in by Dr. R. Barnes for similar treatment. Patient complains of dragging pain and feeling of heaviness in back and left side. A little leucorrhœa. Dragging pain commences in back and abdomen generally about twelve hours before menstrual flow commences, and lasts for the first two days of the period. Perinæum was ruptured eighteen years ago, in first labour, and has never been treated. Has perfect control over bowels unless when they are relaxed, but they are usually very constipated.

January 19th.—On examination, a rupture of the perinæum through sphincter was found to exist.

28th.—*Operation theatre; ether.* Perinæum repaired, Lawson Tait's method.

February 10th.—Sutures removed; no control over bowels yet.

14th.—Has now gained control over bowels.

17th.—Perinæum has healed well. Patient feels much better.

Case X.—March 10th, 1887, J. P., age 38, married fourteen years. Four children. Last pregnancy eight years ago. Last menstruation three and a-half weeks ago. Has seen Dr. Grigg.

March 12th.—Perinæum lacerated right through sphincter.

17th.—*Operation theatre; ether.* Perinæum repaired, Lawson Tait's method. Result excellent.

Case XI.—February 27th, 1888, H. K., age 26, married one and a-half years. One child. Abortion. Last pregnancy seven weeks.

Was in labour thirty-three hours, forceps used. Child born dead, full term. Has been unable to retain her fæces since. The patient was sent to me for operation by Sir Spencer Wells. On examination, a complete laceration of perinæum was found, the sphincter was torn through, and the laceration extended some three-quarters of an inch along posterior wall of vagina.

February 28th.—Period commenced.

March 4th.—Period quite ceased, normal in all respects; is unable to retain her fæces, which run away from her.

5th.—*Ether.* Perinæorrhaphy in the usual way, with the H incision; five sutures.

6th.—No sickness after ether. Wound looking quite healthy.

7th.—Patient doing well. No motions have escaped since operation; is unable to micturate. Catheter.

9th.—Temperature rose again last night to 100.6. Pulse 100. Tongue furred; bowels have not acted.

10th.—Temperature did not rise last night above 99.2. Tongue clean.

12th.—Patient doing well. Wound looks healthy. Tongue clean. Pulse and temperature normal. Bowels acting freely.

13th.—Patient doing well. Wound healthy. Appetite good.

14th.—*Stitches removed.* Wound quite healed.

Mr. E. G. Peck, the Resident Medical Officer, examined the patient three months after the operation, and found it perfectly healed, with complete power over the sphincter.

Case XII.—Mrs. M. sent to me from India by Surgeon More Reid. Complete rupture through sphincter, extending

half an inch up vagina. No control over bowels. Operation by flap splitting. Result, a solid perinæum.

I could give many more similar cases were it necessary. In cases where the rupture is incomplete the operation is indicated to prevent the occurrence of cystocele, rectocele, or prolapsus. These conditions are sure to supervene in the course of time if the patient is left with an incomplete perinæum. One common condition is the existence of an irregularly-shaped cicatrix in the posterior vaginal wall. This is the cause of much pain, often on sitting, or during intercourse, and is frequently overlooked.

REVIEWS.

Transactions of the American Association of Obstetricians and Gynæcologists. Philadelphia, 1888.

Dr. William H. Myers' paper on "The Treatment of Suppurative Peritonitis by Incision" contains some useful hints, so also does that by Dr. Montgomery. In the discussion that followed, it was agreed that the best mode of treatment is to open the abdomen and wash out the peritoneal cavity. The favourable results are attributed to the removal of the serum in the peritoneum, which serves as a culture fluid for bacilli, just as good results were obtained by using pure water as by using solutions of antiseptics. We think the chief exception to this method will be found with young vigorous subjects suffering from a local peritonitis, in whom the formation of adhesions quickly take place, thus preventing general peritonitis. Such cases, however, are not easy to diagnose. Dr. W. P. Manton advocates the treatment of prolapsed ovaries by vaginal tamponnement. He uses strips of absorbent cotton wool, six inches long by half an inch wide. They are saturated in equal parts of glycerine and water, and squeezed dry between the palms of the hands; the strip is then folded upon itself until a quadrate is formed. The tampons should be sprinkled with some antiseptic. They are packed round the cervix until the vagina is from one to two-thirds full, and finished off by a roll of cotton or sheep's wool compressed to half its original size. The treatment does away with the tenderness of the ovary, and a cushion pessary can then be inserted. The most brilliant results are obtained when the ovary, having become prolapsed, is tied down and fixed by inflammatory deposits.

The methods employed in, and the cases requiring, the induction of premature labour are carefully considered by Dr. Stanton. Preference is given to Krause's method—a flexible bougie in the uterus, to be followed if necessary by dilatation of the os by Barnes' dilator. Dr. J. H. Kellogg gives statistics of sixty-three cases operated upon by Alexander's operation. Of these, 72 per cent. were cured, 17 per cent. improved, and 10 per cent. were failures. He finds that Dr Alexander's last suggestion, of opening the canal at a point above the external ring, makes it easier to find the round ligament.

Diseases of the skin are no doubt sometimes caused by disorders of the sexual organs, and the paper by Dr. G. H. Robé is a compilation of the opinions of various authors on the subject. A recent paper by Dr. Jamieson, in England, has shewn that bromide of potash, which, in some people, will cause acne, will, in women suffering from ovarian irritation, have a distinctly contrary effect, and take it away.

Recherches experimentales, et cliniques de l'Embryotomie céphalique, par le Docteur PAUL BAR. Paris: Asselin and Houzeau, 1889,

The author begins by considering the different methods by which the dimensions of the foetal head can be reduced. Van Huevel's combination of chain saw and forceps is condemned. It is difficult to work, and the results obtained are incomplete. Going on to discuss the merits and results obtained by cephalotripsy, he attributes the variations found in its successful employment to be due, in the first place, to the variety of instruments in use; secondly, to the variety of positions in which the head may be seized by the cephalotribe. It is important to recognise the difference in resistance of the various diameters of the base of the skull. When the bizygomatic diameter is crushed, the result is often incomplete, and the skull is reduced to a most irregular shape. When the head is seized behind the zygomæ over the bimastoid diameter, the cephalotribe is found to slip towards

the occiput, although at first it is better able to crush the bones, than when used over the bizygomatic diameter. The most satisfactory diameter to deal with appears to be the occipito-frontal, and it is more easily dealt with when the head is a little flexed. If, however, the flexion is too great, the chances of the cephalotribe slipping are very much increased. When circumstances make it necessary to seize the skull laterally a better result is obtained by taking an oblique diameter.

The cranvoclax is considered to have some advantages. When the pelvic outlet is small and the base of the skull is crushed, the traction which it exercises elongates the head and enables it to pass out by diminishing its diameter. Considerable attention is given to the advantages and working of Simpson's basilyst. One objection to it is the difficulty found in penetrating the anterior portion of the base of the skull ; and another, that in unskilful hands it is very easy to wound the maternal structures.

Travaux d'Obstetrique du Dr. Auvard. Paris: Lecrosnier and Babe, 1889.

Several of these essays, which are now reprinted and bound together, are interesting and show considerable pains and labour in their elaboration. We find several methods described for what may be called the artificial "incubation" of children born prematurely.

Dr. Auvard has a high opinion of the virtues of *Viburnum prunifolium* in cases of threatened abortion, and he thus sums up its advantages as compared with opium, when used as a sedative. The latter confines the bowels ; it has a somewhat toxic action in the puerperal state ; it affects the whole system, and many patients object to take it. Such are its chief drawbacks. *Viburnum prunifolium*, on the contrary, has but little action on the bowels, produces no toxic effect, acts only on the uterus, and is not objected to by patients.

The author has tried the effect of hypnotism during

parturition, and finds it of some service during the first stage of labour in some cases, but not so efficacious as choral, while for the second stage he prefers to rely upon chloroform ; and on the whole he condemns the use of hypnotism, and so we think would all practical Englishmen.

Article XXX. contains drawings and accounts of cases with supernumerary mammæ in the axilla, and will be found interesting to evolutionists.

In the second volume we find an account of intr-uterine tamponnement for hæmorrhage following delivery. Other means appear to us to be more reliable and more scientific. Perhaps the most valuable paper of all is that on the duration of pregnancy. It is based on a series of 250 observations. Taking those cases alone where pregnancy followed a single coitus, the author finds that the mean duration amounts to 275 days.

*SUMMARY OF GYNÆCOLOGY, INCLUDING
OBSTETRICS.*

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION.

Extra-uterine Pregnancy ; operation ; recovery.

By E. P. BERNARDY, M.D.

The patient was thirty-four years of age, had four children, the last being eleven years old. Menstruation had always been regular until 13th September, 1888. The first severe attack of pain occurred November 16th, and subsided under treatment. On December 10th a mass was passed *per vaginam*, but was not examined ; pain however recurred, and on December 29th abdominal section was performed. It was found to be a ruptured tubal pregnancy of the left side, with secondary rupture into the peritoneum. There was also a hydrosalpinx of the right tube, which was removed. The patient made an uninterrupted recovery.

THE OBSTETRIC GAZETTE, CINCINNATI.

*The Use of Electricity in the Treatment of Diseases of the
Female Organs.* By J. WESLEY BOVER, M.D.

The author states that he has treated a number of patients suffering with uterine fibroids, but did not notice any diminution of size during treatment, although it was carried on for some months. He omits to say whether hæmorrhage was checked or not. He reports some very gratifying results obtained in the cases of chronic inflammation of the pelvic organs. Nine cases are described in detail. Some of them had resisted every means of treatment. In one case removal

of the appendages had been strongly advised, but after a course of galvanism it was found to be unnecessary.

ANNALES DE GYNÉCOLOGIE.

M. Tillaux recounts an interesting case of abdominal tumour diagnosed as a multilocular ovarian cyst, but which turned out to be an enlarged uterus. The cavity was divided into two portions, the upper containing fluid, the lower a solid fibrous material. There were numerous adhesions to the intestines. Hysterectomy was performed successfully, but not without the formation of a fæcal fistula.

EDINBURGH MEDICAL JOURNAL.

The Pathological Importance of the Broad Ligaments.

By LAWSON TAIT, F.R.C.S., &c.

The author lays stress on the fact that cysts of the broad ligament are usually unilocular, uniform in outline, and thin walled, with a peritoneal investment perfectly distinct from the tumour, and which can usually be stripped off. They do not as a rule interfere at first with the patient's health. Enucleation should be performed. Palliative measures such as tapping are condemned, although Mr. Tait gives a case where the patient remained well for eight years, after which the cyst refilled.

AMERICAN LANCET.

The Scope of the Curette in Gynæcological and Obstetrical Practice. By ANDREW F. CURRIER, M.D., New York.

There is scarcely a disease of the epidermal, serous or mucous surface pertaining to the interior or exterior of the body in which the curette may not be of service. It is but a few years since it has been determined that more or fewer of the so-called constitutional diseases have a local origin, and that they are susceptible to local treatment during this

primary stage. While the antiseptic principle lies at the root of the matter, there is no form of instrument which has been of greater utility in accomplishing the many successes in the treatment of tuberculosis, scrofula, sarcoma, carcinoma, than the curette.

This paper discussed only the application of the curette to obstetrics and gynæcology, and the principle involved in its use as a cutting, bruising, or scraping instrument. It is as indispensable as the obstetric forceps or the speculum to the practitioner. Recamiér is the modern inventor, and it was called by him a sonde-curette or a gorget-curette, and was designed by him in 1846 as a means for the treatment of "vegetating endometritis" (*Ann. de Therapeutique*, Aug., 1846).

The most extensive article ever written on this instrument is by Boureau. It has, as advocates, the most distinguished gynæcologists of Germany, England, and America, though the opposition to the Recamiér curette was led by such men as Carl Braun in Austria, West in England, and Emmett in our country. Sims attached great value to the instrument, and made numerous modifications; Thomas has given us the best modification of the dull curette. It has two functions, the diagnostic and therapeutic. The indications for the therapeutic use are (1) hæmorrhage, (2) mucous or muco-purulent discharges, (3) sepsis, (4) pain. When used for diagnostic purposes it is but a prolonged index finger.

The chief indication for its use is uterine hæmorrhage, excluding the normal hæmorrhages of menstruation and parturition. These may proceed from:

- a. A diseased mucous membrane.
- b. Disease affecting the parenchyma of the uterus, especially from new growths.
- c. Disease of the uterine adnexa.
- d. Disease of the pelvic peritoneum or cellular tissue.
- e. Stasis from uterine displacements.
- f. New growths, and adventitious tissue in the uterine canal.

Hæmorrhage from the mucous membrane is very common

in malignant disease. The use of the curette here is only palliative, but it brings great temporary relief from hæmorrhage and the offensive discharges which characterise such processes. When the uterine parenchyma are affected with either malignant or benign growths, curetting is found quite beneficial, and also palliative. These growths include the entire class of fibroids which may give rise to hæmorrhage, especially if located near the os internum in the area of the greatest vascularity of the uterus.

Hæmorrhage may be due to congestive and inflammatory conditions of the ovaries and Fallopian tubes; and curetting will be useless unless the process extends to the uterine mucous membrane. For the acute form of pelvic trouble caused by disease in the ovaries and tubes, curetting should not be applied; but in cases in which the mucous membrane is in a chronic degenerated condition, such as frequently follows acute disease, curetting will be efficient. Uterine hæmorrhage may be due to polypi, or the retention of fragments of placenta or decidua; and the relief obtained for the latter by the use of the curette is prompt and satisfactory.

There is no form of treatment for uterine hæmorrhage, if it accompanies degeneration, infiltration, hyperplasia, or chronic inflammatory changes in the mucous membrane, so satisfactory as careful and thorough curetting, performed under anæsthesia with proper antiseptic precautions, and immediately followed by the application of an astringent or caustic antiseptic solution.

The use of the curette is indicated for the treatment of muco-purulent discharges, especially in connection with chronic catarrhal inflammation of the glandular system of the cervical mucous membrane. The operation is simple, and usually painless, and may be done with almost absolute safety. Sepsis is not an infrequent concomitant of such conditions as have been under discussion. The warmth and moisture of a nearly closed cavity like the uterus are favourable to decomposition, which may end in a more or less well defined sepsis. The curette may not remove the septic

influences, but may stop their tide; and the rapid changes for the better in septic cases where curetting has been done, demonstrate that the poison may be eliminated, and that if we can stop the current before the vital powers are overwhelmed, our chances of recovery are very great.

Similar statements may be made in regard to pain, which is a secondary symptom among the indications for curetting. If the cause really lies in the tissues which are curetted, the operation will cause the pain to disappear. That this does occur, is a matter of too common observance to admit of argumentation.

The operation, in general, is one which requires so little skill that it is within the reach of every general practitioner; and there is no doctor in general practice who does not, at some time or other, encounter conditions which call for its performance.

BER. KLIN. WOCHENSCHRIFT.

On the Effects of Morphia and Opium on Menstruation.

The use of opium and morphia, especially of hypodermic injections of morphia in cases of mental disease, has repeatedly been found to be attended by an arrest of the catamenia. To this fact Dr. Roller's attention was first particularly drawn by the reappearance of the discharge which in some cases had been absent for more than a year, on the diminution of the dose or omission of the injections, and he subsequently noticed that regular and even profuse menstruation was arrested by the administration of these drugs, even when exhibited in very moderate doses. In *L'Union Médicale*, 31, 1887, Dr. Lutand, mentioning that in women in whom the morphia habit is confirmed there is absolute amenorrhœa, recommends the use of morphia in uterine affections which are attended with severe hæmorrhage, *e.g.*, carcinoma where an operation is not indicated, myomata, &c. Dr. Roller thinks that the systematic employment of opium and morphia

should come into consideration in every case of profuse menstruation in which there is no direct indication for other treatment. In the insane such indication should be very distinct, as in such cases great caution is required in regard to any gynæcological treatment.

Abnormal Menstruation.

In the *International Klinikal Rundschau* Dr. Diamant lately gave the particulars of a case in which menstruation was established at the age of two years, took place regularly every month, and lasted five days. The little girl, born in 1882, had all her teeth when about two months old; in 1886 she weighed sixty-four pounds, and when six years old seventy-nine pounds, and was quite robust. The head and upper limbs are formed like those of other children of the same age, but the lower part of the body, especially the loins, gluteal regions, and thighs exhibited a development which is not usually seen before puberty. The child's voice is a very low one. There have been no catamenial discharges since January, 1888, but at every menstrual period there are epileptiform seizures which increase in frequency every month.

THE AMERICAN JOURNAL OF OBSTETRICS.

A Case of Absence of the Bladder.

Dr. J. T. Winter relates the case of a child now eight years old, in which there is no bladder. The parents noticed nothing until the girl was two years old, when an examination revealed the malformation. The external orifices of the ureters can be plainly seen.

ZEITSCHRIFT FÜR HEILKUNDE.

Carcinoma of the Uterus in an Eight-Year-Old Girl.

By F. GANGHOFER.

A girl eight years of age, moderately well nourished, had suffered for the last two or three years almost without inter-

ruption with hæmorrhages from the genitals. On examining by means of the speculum, a growth the size of a hazelnut, lobulated, with granulated surface of a pale reddish-gray colour, was observed on the anterior lip of the os uteri, and which also extended somewhat over upon the anterior vaginal wall. The growth bled upon gentle touch, and at the same time a piece the size of a pea came away. On account of the persistence of the hæmorrhage, the tumour was removed two days later with the scissors and the surface of the wound cauterized. The microscopic examination proved it to be a medullary carcinoma which had its origin from the cervical mucous glands of the portio vaginalis uteri.

BRITISH MEDICAL JOURNAL.

Male Sterility and Gynæcology.

Dr. Fuerbringer, of Berlin, has written some important observations on this subject in the *Deutsche Med. Wochenschrift*, No. 28, 1888. He believes that sterility in the male is far more frequently the cause of barren marriages than is generally believed to be the case. Aspermatismus is associated with complete impotence, but azoospermia, or absence of spermatozoa in the semen, a condition by no means rare, may exist with perfect potency, and on that account is very easily overlooked. With few exceptions, azoospermia is caused by obliteration of part of the seminal ducts. This condition is generally caused by double gonorrhœal epididymitis, or inflammation of the vas. After that malady, the chances are, Dr. Fuerbringer has calculated, nine to one that azoospermia will follow. Prognosis appears to be hopeless when the condition in question is not discovered till three or four months after the onset of the local inflammation. The chief importance of the management of the case lies in accurate diagnosis. True aspermatism is traced by Dr. Fuerbringer to arrested development of the ejaculatory ducts. He declares that in several cases of sterile marriages under his own observation the unfortunate wife had been sent from physician to physician

or from hospital to hospital, and her cervix divided or her endometrium scraped, until a glance at the microscope proved that nothing was wanting to ensure the blessing of children excepting spermatozoa. Dr. Fuerbringer's observations are worthy of consideration. No doubt the increase of temperance involves the relatively greater frequency of those forms of gonorrhœa where the early symptoms are very mild. Hence the first stages may now be as much neglected by patients as they have ever been wont to neglect later stages. The more a case of gonorrhœa is neglected, the greater will be the chance of serious secondary complications.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF
CHICAGO.

Regular meeting, Friday, March 15th, 1889, the President,
CHARLES T. PARKES, M.D., in the Chair.

Dr. W. W. JAGGARD exhibited the

Ecouvillons and Curettes of Doléris.

Subject for the evening's discussion,

Puerperal Eclampsia.

Dr. W. W. JAGGARD read the following notes on the

Etiology of Puerperal Eclampsia :

GENTLEMEN,—At the request of the President, I have prepared a brief outline of some of the more important facts in the causation of puerperal eclampsia.

The term denotes epileptiform convulsions, characterised by recurrence of paroxysm after longer or shorter pauses, followed by unconsciousness, that occur during labour, pregnancy, and the puerperium. As thus defined, the expression puerperal eclampsia restricts us to no particular theory as to etiology.

Happily the symptom, justly regarded as a disease, is of infrequent occurrence. In general terms, eclampsia is observed once in five hundred deliveries. Out of 316 cases

collected by Carl Schroeder, convulsions occurred 190 times during labour, 62 times during pregnancy, and 64 times during the puerperium.

Among the modern theories of etiology, the first, as well in point of time as in present importance, is the doctrine that eclampsia is the expression of acute urinæmia, conditioned either upon functional or organic disease of the kidneys, or upon obstruction to the flow of urine through the ureters. The evolution of this conception has been gradual, and it may be profitable to trace the stages of its development.

After the recognition of the association of albuminuria and disease of the kidneys with eclampsia by Lever (1842), Jevilliers and Regnault (1848), Frerichs (1851) advanced the hypothesis of uræmia, and suggested that the convulsions were due to the retention in the blood of urea and its decomposition into ammonium carbonate. This notion has become obsolete, since, aside from an isolated observation by Spiegelberg (1870), the presence of ammonium carbonate in the blood in sufficient quantity to cause convulsions has never been demonstrated, notwithstanding numerous examinations of the fluid by responsible chemists. The weak points in the hypothesis of ammonemia have been pointed out particularly by Rouxmelaire, Voit, and Bartels.

The notion of the mere retention of urea, without decomposition changes, as the cause of the disease, has been shown to be without basis in fact. Winckel has demonstrated that no such accumulation of urea occurs in the most important organs of dead eclamptics—that is in the liver and muscles, but that, to the contrary, these organs contain less than the normal quantity. E. Voit and M. Stumpf have observed that the elimination of nitrogen through the urine in convalescent eclamptics is about equal to the minimum excreted in the condition of absolute starvation.

Carl Braun, at the same time that Frerichs published his classical treatise (1851), declared puerperal eclampsia to be identical with the convulsions of Bright's disease. Braun's theory (1857) in his own words is: "The interruption of the

secretion of urine in both kidneys, the acute retention of all excrementitious matters (normally excreted by the kidneys) in the blood and tissues, exercises a highly pernicious influence and explains the occurrence of eclampsia." In proof of this theorem, Braun has brought forward an amount of evidence that almost amounts to demonstration. Although certain observers affect a disbelief in this etiological doctrine, yet they all fully recognise it in prevention and treatment. Still, Braun's theory, just quoted, cannot be accepted as a universal proposition. It explains the very large majority of cases of eclampsia, but it does not explain all cases.

As originally pointed out by Morgagni (1767), and a later period by Halbertsma (1871) and Löhlein, flexure, infraction, stretching, catarrh, pressure may prevent the flow of urine through the ureters, and condition, directly or indirectly urinæmia. Although no doubt exists as to the occasional operation of this factor, its etiological moment does not approach the significance of renal insufficiency. Out of thirty-two cases of fatal eclampsia, Löhlein demonstrated dilatation of one or both ureters in eight, or twenty-five per cent. Löhlein concludes that in five of these cases an already insufficient urinary excretion was still further limited, or even entirely interrupted, by retrostasis of urine in consequence of compression of the ureters, so that urinæmia and its symptom, eclampsia, followed.

Much light has been thrown within a recent period upon the pathological significance of urinæmia. The toxicity of normal urine has been demonstrated, although there is some difference of opinion as to the active agent. Bouchard claims to have isolated five organic poisons, and his observations are supported by Battlehuer, who recognises the ultimate cause of eclampsia to be a decomposition product like a ptomaine. On the other hand, Voit, Feltz, and Ritter, Astachewsky (1881), Lepine (1885), Stadthagen (1889), maintain the dominant importance of the potash salts, while they admit the effect of the retained nitrogenous matters—urea, uric acid, kreatinia, and the like—in the limitation of tissue metabolism.

Closely similar views have been expressed by Nothnagel, Strumpell, v. Jakschk, Fleischer, and Peter.

A plausible explanation of the immediate causation of convulsions in cases of urinæmia has been given by Carl Schroeder. The experiments first performed by Kussmaul and Tenner prove that epileptiform convulsions are invariably produced only by ligature of the arteries that supply the brain. It is, accordingly, in a high degree probable that puerperal convulsions are caused by cerebral anæmia. How is this cerebral anæmia effected? The most highly probable view is that of vaso-motor spasm of the blood-vessels at the base of the brain. In favour of this view there are the following facts: (1) The inability to explain the cerebral anæmia in any other way; (2) the sudden onset of the convulsions and the rapid *restitutio in integrum*; (3) the negative results of autopsies; (4) the effect of remedies that cause dilatation of the vessels of the brain.

As to the causes of the vaso-motor spasm, we have the following facts: (1) The plus state of excitability of the nervous system, observed in pregnant, parturient, and puerperal women as in children, so that a vaso-motor spasm will occur, the operation of a cause that at other times would produce no such effect; (2) the vaso-motor centre is more irritable, especially during labour; (3) with the predisposition upon the part of the nervous system in general, and of the vaso-motor centre in particular, the toxic state of the blood is amply sufficient to give rise to an explosion. What other irritants are at work it is impossible to say. Possibly, as in epilepsy, irritation of the peripheral nerve-endings—that is, irritation of the uterine nerves, or pressure upon the ischiatic nerves—may play a certain rôle.

Of uncommon interest are the recent investigations of Stumpf.¹ This observer found that when the expired air of

¹ Verhandlungen des ersten deutschen Gynekologen Congresses in München: Archiv. f. Gyn., Bd. XXVIII., Heft 3, p. 471; Münchener Med. Wochenschr., 1887, Nos. 35 and 36.

an eclamptic smelled of acetone, that acetone could always be demonstrated in the patient's urine, distilled or not distilled. Knowing the relation of acetone and allied bodies and aceturia to the coma of diabetes, he at once sought for sugar in the urine of the same individuals, and succeeded in showing its presence in all the cases in which urine in sufficient quantity for testing could be collected. Stumpf came to the conclusion that, under abnormal decomposition processes, a nitrogen-free, toxic substance—possibly acetone or an allied body with the same reaction—is developed that during excretion irritates the kidneys to the extent of nephritis, exercises a pernicious influence upon the colouring matter of the blood, alters the activity of the liver cells so that glycosuria follows; that this action on the liver cells may go on to destruction of the hepatic parenchyma, the production of acute yellow atrophy with the formation of tyrosin and leucin, and, through irritation of the brain, coma and convulsions. Stumpf leaves to the future the determination whether this body is the result of an agent of infection derived from without, or whether it is derived from the foetus *in utero*. Winckel is of the opinion that the predisposition to eclampsia in multiple pregnancy, the fatal effect of the eclampsia upon the foetus, the peculiar *rigor mortis* of the infants, and, finally, the item that with the death of the child in pregnancy the danger to the mother grows less—that all these facts indicate a close relation between foetus and mother in the genesis of eclampsia.

Gustav Braun¹ has reported several cases of eclampsia in which hæmorrhagic hepatitis was the most significant lesion.

Suggestive as the observations of Stumpf and Gustav Braun are, facts are as yet too few to admit of generalization. The importance, however, of more exact analyses of the blood and urine in all cases is obvious.

Passing mention must be made of the Traube-Munk Rosenstein hypothesis, if for no other reason, because Dr.

¹ Sitzungs-Berichte der Geburtshülflich-Gynäkologischen Gesellschaft in Wien. I. Jahrgang.

Freer, of Chicago, some years ago performed certain experiments that led him to broach a similar supposition. Traube's view was that the hydræmic state of the blood incident to pregnancy, and increased by the loss of albumin in Bright's disease, constituted the important predisposing factor; that the blood-pressure is elevated on account of the heart-hypertrophy of pregnancy; that, under the reflex stimulus of uterine contractions, blood-pressure becomes so great as to cause œdema of the middle brain and cerebral cortex, resulting in pressure anæmia that is followed by coma and convulsions. Rosenstein modified this hypothesis by the omission of the effect of the loss of albumin by the blood. He merely eliminated the nephritis. These notions, as well as the conception of eclampsia as a form of acute epilepsy, at the present possess a purely historical interest.

The notion that eclampsia is an example of infection is by no means new. The fact that the disease is always sporadic, never epidemic, renders this hypothesis improbable. But it is quite possible that the Bright's disease may be due in certain cases to infection. Out of five cases recorded by Doléris and Pavey, two were ascribed to an infection nephritis. In these cases it is claimed that the infection of the blood pursued a course parallel with the convulsive seizures. The experiments of E. Blanc¹ with microbes isolated from the urine of an eclamptic tend to support this view. Inoculations of rabbits with these microbes were followed by convulsions in some cases, and by infection nephritis in others. Upon this phase of the subject, however, Dr. Bayard Holmes has something to say.

About thirty cases of eclampsia have come under my own observation in hospital and private practice. In all of these cases the etiology was perfectly clear. They were all examples of urinæmic convulsions, conditioned upon Bright's disease.

Dr. BAYARD HOLMES made the following remarks:

¹ La Semaine Médicale, 1889.

On the Relation of Bacteria to Puerperal Eclampsia.

MR. PRESIDENT AND GENTLEMEN,—It is well known that the subcutaneous injection of the urine of the healthy does not result in symptoms of uræmic poisoning, while these symptoms are exactly simulated by the injection of nephritic urine. The demonstration of acute nephritis in fatal cases of puerperal uræmic convulsions is not wanting. The bacterial origin of many other cases of acute nephritis is most emphatically demonstrated (Babes: *Bact. untersucht u. septische Processe*, &c., Leipzig, 1889). We have heard to-night that bacteria have been demonstrated in some cases of uræmia. On no other supposition or theory have uræmic convulsions been satisfactorily explained. A toxæmia is conceded by all to be the prime condition of the disease. The normal constituents of the urine do not produce this toxæmia; the products of nephritic urine do produce it. Nephritis is usually, if not always, present. This nephritis is sometimes, if not always, due to bacterial thrombosis or embolism. This is the only adequate cause which has up to the present time been demonstrated in any case. It is in perfect accord with the origin of nephritis under other circumstances.

As there must in all cases be a point of entrance of the bacteria and diminished local resistance, we may be asked to go a step further and demonstrate these. The point of entrance is probably the intestinal tract. The low state of vitality which is manifest in many pregnant women, living after the manner dictated by modern civilization, results in such a low state of general resistance that teeth are invaded and abscesses appear elsewhere. Mechanical constipation produces in the intestinal tract points of arrested circulation or pressure atrophy where invasion takes place into the lymphatics of the mesentery. These bacteria do not need to be pathogenic under ordinary circumstances.

They circulate freely in the blood until they come to the kidneys and other organs, where mechanical capillary stasis is present from the pressure of the enlarged uterus, assisted perhaps by improper dress. Under such circumstances, other-

wise harmless saprophytic bacteria multiply in the non-resisting but still living tissues of the kidney, and the products of their growth produce coagulation necrosis and all the less marked appearances of nephritis. The extent of these changes need not correspond to the severity of the symptoms. In case the infection produces a very toxic ptomaine, the lesion may be only just enough to prevent its rapid elimination ; while, in case the ptomaine is less toxic, the symptoms may be trivial until the suppression of urine is almost complete.

DANIEL T. NELSON, M.D., read the following paper on

Diagnosis and Prognosis.

Puerperal eclampsia is an acute epilepsy in a pregnant woman, due to an acute anæmia, rarely a hyperæmia, of the brain, produced by poisons circulating in the blood, such as urea, cholesterin, and the like, produced by defective excretion by the kidneys, intestines, and skin. The disease occurs most frequently in first pregnancies. The pregnant uterus pressing upon the ureters to narrow their calibre and prevent the discharge of urine into the bladder ; or the tissues about the uterus are unyielding, elongating the ureters as the uterus grows, and so preventing the flow of urine ; and, in a reflex way, the pressure of the uterus upon sensitive nerves and ganglia in the pelvis, and perhaps from morbid conditions in the uterus and ovaries, acting directly upon the brain, especially the medulla and pons, all the reflex centres being normally exalted in their sensitiveness during pregnancy to facilitate the ordinary processes of nutrition.

The disease is more frequent in irritable and highly sensitive organizations, and in those of corpulent habit, for, in such, excretion is not as thoroughly performed as in others. Sudden suppression of the action of the skin, too, is not an infrequent cause of the disease, causing substances of a poisonous nature to be retained in the blood which would otherwise be thrown off. Puerperal eclampsia, then, is not

properly a disease, but rather a symptom of diseased conditions, particularly of the excreting organs.

With this brief description of the disease, the diagnosis is usually easy.

When fully developed, the disease is not likely to be confounded with any other, except true or chronic epilepsy.

The history of the case and the fact of pregnancy will easily distinguish puerperal eclampsia.

Convulsions arising from disease of the nervous centres are likely to be local, affecting only the portions of the body supplied by these centres.

Diseases of the meninges of the brain or spinal cord, producing convulsions, are likely to be attended with pain, fever, and irregular nervous disturbances, which readily point to the location of the disease.

The determination of whether the eclampsia is due to acute or chronic disease of the kidneys is of little moment in diagnosis, but is of great importance in the prognosis of the case.

The most important diagnostic symptoms for the physician to note and rightly interpret are the various nervous disturbances, such as severe headache, dizziness, persistent nausea and vomiting, diarrhoea coming on suddenly and watery in character, insomnia, special senses disordered—as dimness of vision, spots floating before the eyes, ringing in the ears, disagreeable taste and smell—disturbance of motor nerves, irregular spasms of voluntary and involuntary muscles, reflexes unusually active.

Oedema, general or local, temporary or continuing, should always attract attention to the condition of the excretions, and examinations of the urine be made regularly and frequently. Defective excretion by the bowels and skin should likewise be noticed and corrected.

Poisoning by lead, arsenic, or the preparations of mercury is to be considered, but the history of the case is likely to eliminate these readily.

The examination of the urine is of the greatest importance

to determine the presence or not of albumin and the amount of urea excreted.

The intelligent and observing physician is likely to readily detect the premonitory symptoms, if he has the opportunity to look for them ; but, unfortunately, he is usually first called only after the first spasm has occurred and when the diagnosis is already made.

This is a disease, surely, in which prevention is the best cure. The prognosis is always grave, and can only be fully determined when the extent of the lesions in vital organs is known, and the rapidity with which the excreting organs are carrying off the poisonous substances.

The more frequent the convulsions, the longer they continue, and the greater their severity, the more serious is the prognosis.

The continuance, after delivery, of serious organic disease of the kidneys and lesions of important structures in the brain, as the result of the convulsions, will complicate the ultimate recovery and render the prognosis uncertain.

The diminishing frequency and severity of the spasms, with the free secretion of urine, with urea increasing and albumin decreasing, and a subsidence of the nervous disturbances will enable us to hope for a speedy and complete recovery, and no return in subsequent pregnancies.

Dr. EDMUND J. DOERING read the following paper, entitled—

Prophylaxis of Puerperal Eclampsia.

Albuminuria during pregnancy may not cause puerperal eclampsia, and eclampsia may occur without a renal lesion, but the fact remains that the danger of puerperal eclampsia is manifoldly increased when a pregnant woman suffers from renal insufficiency, whether the same be organic in character or due to mechanical interference with the renal circulation. It is our duty then to carefully examine, from time to time, the urine of every pregnant woman. It is unfortunately true that in the majority of cases of pregnancy the urine is never ex-

aminated. It is also true that in the majority of cases in which the urine is examined, the heat, or nitric acid, tests constitute the so-called "urinary analysis." The fact seems to be utterly ignored that the urine may be and often is entirely free from albumin, and still indicates the existence of a serious renal lesion. We have not done our duty to our patient, particularly if she be a primipara, till we have determined the exact amount of urine secreted in twenty-four hours, and ascertained the actual specific gravity, so as to know the amount of solids passed, together with a careful chemical and microscopical analysis of a mixed sample. Occasional faint traces of albumin occur in a large percentage of pregnant women, and is of no special significance, provided the quantity and specific gravity of the urine remain normal. But the persistence of albumin, or the presence of casts with or without albumin, or a diminished amount of solids passed in twenty-four hours, indicates the necessity of prompt prophylactic treatment to ward off eclampsia. The patient should be clad in woollen garments. Extra precautions should be taken to prevent chilling of the body by exposure to cold or wet. The diet should consist principally, if not entirely, of milk, which can be consumed in quantity varying from two to four quarts per diem. Fruit and fish may be permitted, also farinaceous articles of food and some vegetables. Meats are to be used sparingly, if at all; moderate exercise may be advised. The therapeutic indications are, of course, to keep up a free action of the skin, bowels, and kidneys. Warm baths should be regularly employed. The bowels should be moved daily, and an excellent laxative for this purpose is cream of tartar in tablespoonful doses every morning. Compound jalap powder has also a favourable action. In anæmic subjects, iron, in the form of Bashan's mixture given several times daily, will be of decided benefit, being tonic, diuretic, and diaphoretic in its action. Infusion of digitalis, in combination with acetate, citrate, or bitartrate of potassium, is also an excellent remedy. The patient should be advised to partake freely of fluids, and Vichy, Buffalo

Lithia, and Londonderry Lithia waters are specially indicated. If there is great nervous irritability, rectal injections of chloral at night will be of great service. Finally, if we have exhausted all these measures and the symptoms become worse, the dropsy increases, or the central nervous system becomes involved, the induction of premature labour may have to be seriously considered or become absolutely necessary.

Dr. CHARLES WARRINGTON EARLE read the following paper, entitled—

The Treatment of Puerperal Eclampsia.

The attack has appeared. The parturient, 'either before or during or after labour, is in the midst of one of the most formidable and perilous complications which ever occur to one in her condition. There is danger to both mother and child, and the treatment of this terrible complication should engage our earnest attention.

Notwithstanding everything which has been suggested by my colleague in the way of prevention, and the improvement in treatment which has been made during the past twenty years, puerperal eclampsia still remains the *bête noir* of obstetrics.

According to many of the older teachers, one-half of the patients attacked with the disease died; and in all the cases which Fordyce Barker could collect up to 1855, 32 per cent. of all occurring before and during labour, and 22 per cent. of those after delivery ended fatally. In this gentleman's practice to 1874, the mortality had diminished to 14 per cent.

Any treatment decided upon must necessarily be varied according as that treatment is administered to one early in pregnancy, during parturition, or after delivery.

The means for treating this terrible condition may be ranged under the following headings. And it is not intimated that every drug which has been used, or every procedure suggested, is mentioned.

I will consider very briefly :

(1) Evacuants and Detergents.

- (2) Nerve Sedatives and Anodynes.
- (3) Anæsthetics.
- (4) Bleeding.
- (5) Operative Measures.

The remedy indicated, or the procedure which offers the best result, differs according to the time of the eclamptic attack. The treatment, then, whatever it is to be, should be considered during the following periods : before, during, and following labour.

Whatever the time may be, however, or what plan of treatment it is proposed to inaugurate, it goes without saying that nothing of an exciting nature which can be avoided should be used ; that the surroundings should be such that good air and freedom from incumbrances as regards clothing, &c., are insured. If vaginal examinations are objectional to her, no more than simply enough to acquaint ourselves with the absolute progress of the dilatation of the os should be made. Indeed, every cause which may produce worry on the part of our patient must be avoided.

We must remember that, however well demonstrated the uræmic theory may be to us, there have been during all times a goodly number who believe that puerperal eclampsia is a neurosis, and that any reflex irritation of the spinal system is liable to exaggerate the convulsions.

Treatment during early Pregnancy.

Sometimes the attack has been expected ; for while exceptionally it takes place without any premonitory symptoms, usually there is œdema, or a terrible neuralgia, or a condition of the nervous system that has caused the experienced *accoucheur* to expect it. The patient has had preventive treatment. It does not suffice : the convulsion is on. We must now shape our treatment for this case with the knowledge that a single convulsion may cause the death of a patient, and that it is the rule that usually in two days either a cure is effected or a serious complication makes its appearance which will prove fatal.

As I remarked before, the convulsion is on. As rapidly as possible these things should be done : a little chloroform given ; the patient put in a hot-bath, and a non-irritating cathartic—one which will produce a large watery stool—administered. Whatever procedure may be adopted later in the case, it appears to me that the foregoing treatment is plain. Of course, as adjuvants, a hypodermic of morphia may be given and a dose of chloral, either by mouth or rectum. The questions will also arise at once as regards the expediency of using pilocarpine as an aid in the elimination by the skin of retained excrementitious matters. The value of this remedy will be discussed later.

More than a passing notice should be given to the hot-baths. They are extensively used in many of the largest obstetrical hospitals. "The patient is placed in a bath-tub filled with water at a temperature slightly above 99° F. The tub is then covered with a heavy blanket, leaving the face free, and the temperature of the water is gradually elevated to 110° or 112° F. She remains in the bath thirty minutes. A towel rung out of ice-water and placed upon the head relieves any distressing cephalic sensations. While in the bath the patient drinks large quantities of water. Upon emerging from the bath she is covered with a warm sheet and enveloped in an upper and lower layer of thick blankets, so that only the face is exposed. Within a very few minutes free perspiration is observed. The sweating is continued for two or three hours. According to the gravity of the case, the hot-water bath may be repeated once daily for an indefinite period. The relief of all threatening symptoms under this simple plan of treatment alone is surprising. Sometimes the hot-water bath acts as an efficient excitant of uterine contractions, and premature labour is induced."

Concerning the usefulness of chloroform and chloral, there is in my mind no doubt. The administration of both have their opponents, but in my judgment they are exceedingly useful.

Some of the most brilliant recoveries in the literature

have come about from hypodermics of morphia, rectal administration of chloral, and the inhalation of chloroform. I should not fail to suggest, even in a case where the convulsions are occurring thus early in pregnancy, the propriety of venesection. I am informed, however, that this particular line of treatment is to be presented by others. I will probably refer to it later.

In the case I have supposed, if the convulsion persist for a long time, or if the attacks come frequently, the question of the indication of labour would come to my mind even thus early. Here, however, I approach a subject concerning which authorities do not by any means agree.

The question comes fairly before us early in pregnancy, or any time before labour commences with the os not dilated. Are we justified in attempting an operation, the irritation of which may possibly produce a convulsion, and the completion of which may not cause a suspension of the attack for which the operation is commenced ?

I range myself along with those who would consider the propriety and justifiableness of carefully—while meeting all therapeutic indications—evacuating the uterus of its contents.

Treatment of Eclampsia during Labour.

Some of the factors entering into the treatment of convulsions during pregnancy or before full term, and which are not fully agreed upon by the profession, do not engage our attention at this time ; for instance, the induction of labour, either in the interest of the mother or child. Labour has already commenced ; the convulsion is present.

To me there is no question as to the propriety of hastening it (labour) by every means possible, and the possibility of producing a convulsion by artificially dilating the cervix is so small that it need not be entertained.

In a considerable number of cases which I have collected from the journals published during the last two or three years and which do not enter into any of the tables published in the text-books, there are some data favouring venesection at the time. Indeed, Swayne says that in thirty-four cases occurring

in his practice bleeding, anæsthetics, and delivery—in the order named—have given the best results.

Jas. Murphy (*Lancet*, 1886), however, in the treatment of five cases with pilocarpine as the principal remedy, aided by other adjuvants, has saved all his patients. His plan is to inject subcutaneously from one-fourth to one-third grain of this drug every six hours, and his results are certainly remarkable. In one of his cases thirty-three convulsions occurred during the seventh month, but after the use of the pilocarpine premature labour was averted and a healthy child born at term.

Returning, however, to consider bleeding, it should be said, according to Kucher, that this procedure has been entirely abandoned in the Vienna clinic, and the same author says that it is very doubtful whether it ever has any beneficial effect whatever. In fifty-two cases, upon which he bases his paper, only seven were fatal. This is an excellent showing when we consider that the mortality was formerly twenty to thirty per cent. They depend in the Vienna hospitals upon diuretics, diaphoretics, and cathartics. It is also believed that the indication is to expedite labour by all reasonable means, but that too active interference is more dangerous than the eclampsia.

The use of *veratrum viride*, since the days of Fordyce Barker, has had its advocates, and more recently, in a discussion which took place at the Ninth International Medical Congress, it found a considerable number of advocates. Dr. Jewett, of Brooklyn, in an experience of twenty-six cases seems to show that in *veratrum viride*, if given early, we have a well-nigh certain means to prevent death from puerpera, eclampsia.

Some one has said if the pulse be kept at 60 by *veratrum* no convulsion can take place. Dr. Jewett gives the drug hypodermically, and keeps the patient quiet and in the lying position.

Breus has had remarkable results from the hot-pack—seventeen cases and only two deaths. It is claimed for this

treatment that it does not induce abortion or premature labour. Patients are immersed in the hot bath, and its action continued by the hot-pack in blankets.

In many cases the results are not as good as they might be, from the fact that the details of treatment are not fully and faithfully carried out.

If chloroform is used it should be continuous and its effect profound. If chloral is to be used, and cannot be given by mouth, thirty or forty grains should be given by rectum, and repeated in twenty minutes, if necessary.

With the present light on the subject, it appears to me that for convulsions at full term the hot bath, anæsthetics, and a termination of labour as rapidly as can be done without injury to the soft parts, is the treatment for to-day.

For Convulsions after Delivery.

Here factors are wanting which were present while the woman was in labour. The uterus has been emptied of its contents, but the convulsions continue. The induction of labour or rapid delivery by version or forceps cannot now be considered. Control eclamptic attack with anæsthetic, and eliminate with all rapidity by the skin, bowels, and kidneys. In addition to the hot bath, we now have the pilocarpine, aided by what seems to me the best cathartic—elaterium. To produce the full effect of the last-named drug, it seems to me that we should have at our command as potent a hypodermic tablet as we have of pilocarpine or morphia. This is particularly true for cases who cannot swallow.

To sum up, then, we have :

(1) For convulsions before delivery : The hot bath, morphia and pilocarpine hypodermically, chloral and bromide of potassium by mouth or rectum ; veratrum viride to reduce heart's action and lower arterial tension ; possibly bleeding ; the induction of labour.

(2) For convulsions during labour : The hot bath, morphia chloral anæsthetics ; a rapid delivery with all precautions.

(3) For convulsions after labour : Control eclampsia by anæsthetics, and rapid elimination by all the emunctories.

Dr. WILLIAM E. CLARKE read the following paper on

Bleeding in Puerperal Eclampsia.

From the earliest dawn of medical science to within the memory of some of the Fellows of this Society, blood-letting was almost universally regarded and employed as one of the most valuable of remedies. In the discussion, this evening, of the curative treatment of puerperal eclampsia, especially in reference to venesection, the subject officially assigned to the writer, it may be well to inquire how much the present popular disfavour of the remedy and its disuse by the profession is due to popular clamour, to the caprices of fashion, to the vagaries of pseudo-practitioners, or how much to the advantage of pathological knowledge and the deductions of sound scientific research.

Popular clamour and the blind zeal of the pseudo-scientist and misguided reformer have had very much influence in the matter. Samuel Thompson, the founder of the so-called Thompsonian system, author of "New Guide to Health and Life and Medical Discoveries," published about 1825, had a great following. A large number of illiterate men took upon themselves the title of Thompsonian doctors and commenced to practise. They all took strong ground against blood-letting and all antiphlogistic treatment.

Homœopathy has had a powerful influence upon an entirely different class—a class of much more social influence, with imaginations far more exalted, but with reasoning faculties developed in inverse proportions. Blood-letting in any form has been the salient point of all their attacks on the lines of rational practice. The secular papers took up the cry, and Horace Greeley, the sweetheart of the reformers of the period in his capacity of editor joined in the cry of Blanche and Tray that the blood was the life, and to take away the blood was to take away the life.

Some thirty-nine years ago a petition was presented to the

Legislature of New York, praying that blood-letting might be made a penal offence. But blind and unreasonable prejudice against bleeding has not been confined to the non-professional or to the illegitimate practitioners. A few in the regular profession have vied with the charlatans in their efforts to bring this remedy into reproach.

In a paper read before the section of Obstetrics and Diseases of Women of the American Medical Association in 1884, on "Laceration of the Female Sexual Organs Consequent on Parturition : their Causes and Prevention," the distinguished writer, Dr. Gross, took strong grounds in favour of the lancet. In the discussion that followed, one member, after stating that he had never bled a woman—thus virtually confessing that he knew nothing of the effects of such a procedure—advanced the argument that, according to Dr. Gross' views, a woman ought to be born with a lancet about her neck to meet the difficulty. This sage remark was received with rapturous applause, but no one ventured to inform the section whether their all-sufficient remedies, chloroform and morphine, had ever been found in that particular locality.

Another member, a gentleman of prominence in the profession, speaking of a woman who, as he expressed it, had received poison into her system and fever had been produced, asked the question, "Why bleed such a woman, lessen her vital powers, take away her blood, which is 'the life thereof'?" thus basing his pathology on the Pentateuch. In his advocacy of sedatives he gave no reason why he did not let the life flow with all the force and volume possible instead of damming it up in the vessels of the brain by sedatives. Even he, the strongest critic of the paper, said he would bleed in some cases of puerperal convulsions. Allison, in 1856, assumed that the type of disease had changed from a higher to a lower type, and that while bleeding and other antiphlogistic remedies twenty years before were useful, at that period they were harmful.

Dr. Bennett contended that there had been no such change in the type of diseases ; that bleeding and other antiphlogistic

remedies were contra-indicated, in all internal inflammations by principles of sound pathology.

To the writings of these men, together with Dr. Flint of our country, is probably due, more than to any other respectable medical writers, the changed views among the regular profession. Still, Dr. Bennett, in the discussion with Dr. Watson on this question, agrees with the latter that we should so bleed as to secure its advantages and avoid its disadvantages.

The writer of this paper, during a stay at Washington, made a very thorough examination of the literature on this subject, in the library of the Surgeon-General's office. He found that the consensus of a very large majority of the eminent members of the profession who wrote on the subject, during this war on blood-letting, is in favour of it, particularly in selected cases of puerperal eclampsia. He further believes, from his clinical observations in a practice of more than forty years, that in cases of puerperal eclampsia where there is turgescence of the vascular system, or in cases of uræmia, bleeding is called for to relieve vascular tension and to remove damaged blood from the system.

In 1855 the writer reported to the Chicago Medical Society a case of eclampsia that was promptly relieved by bleeding, after chloroform had been used, only apparently to increase the plethoric condition of the patient. The report was published in the *Medical Journal* of June of that year.

The writers of that day usually described puerperal eclampsia, under three distinct varieties: hysteric, epileptic, and apoplectic. The position taken in the report was that, chloroform only was the proper remedy in the first variety and bleeding in the two others.

To the principles recorded in that paper the writer still adheres, and in some ten cases, four of which have been seen in company with Fellows of this Society, the lancet has been used with happiest results. In one case, also seen with a Fellow of this Society, no blood was taken, as it was regarded as hysterical, but the convalescence was far more tedious than

in any of the others. In no case coming under his observation has he seen any of the evils attributed to the abstraction of blood, but he believes that he has seen suffering and death which might have been averted by the timely and judicious use of this much-abused but potent remedy, if the attending physician had not been prejudiced or had had the moral courage to resort to its use. The attention the subject is receiving from the profession is a hopeful indication that venesection is soon to resume its place as a valuable therapeutic measure.

Dr. EDWARD WARREN SAWYER, in opening the discussion, said: I think I express the sentiment of the meeting when I say that the subject has been presented to the Society in a most masterly way. I think its clearness and the interest in the subject have been increased by the plan adopted by Dr. Jaggard in the presentation of the subject.

Concerning the subject of eclampsia I have but two points to speak of, and both concern its etiology. I recall very distinctly a most interesting conversation upon this subject that I had with the late Joseph Freer, who had experimented extensively with reference to ascertaining the condition of the urine in eclampsia, and the effect of that urine upon the lower animals when injected into the veins. His conclusions, or his chief conclusion, was that eclampsia was not due to uræmia as much as popularly thought, but that it was really due to anæmia of the brain: this condition being effected by the œdema of the brain of the eclamptic subject.

The second point which my practice has demonstrated to me effectually is that the danger or the fatal results of eclampsia are not proportionate at all to the amount of anasarca presented by the patient. In fact, of the four cases of eclampsia of which I have a very distinct recollection, the two fatal cases scarcely presented any anasarca, while the cases that recovered presented an anasarca that was never before seen by me. In both of these cases the degree of anasarca was such in the genitals that the patient could not possibly approach her knees—such a deformity I had never before

seen ; yet both cases recovered. In one, vision was nearly lost for a number of weeks ; in the other, hearing was greatly impaired. In the fatal cases there was less anasarca than is usual in the primipara, and it was limited to the feet. In one of the fatal cases the urine had been examined during pregnancy and no albumin found, but within five minutes of the birth of the child she had eclampsia followed by death.

Dr. W. H. BYFORD : I had hoped that I could shirk the responsibility of engaging in this debate, but I have been so much entertained with the papers read that I feel it would hardly be fair in me to decline saying something on the subject. These papers have thrown me into a kind of reverie or retrospection, causing me to look back to old times and to follow the subject down from the years of which Dr. Clark speaks to the present time, recalling what the pathology of the disease was at that time, and what the therapeutics were as compared with the present. At that time, doctors used to consider the pathology of eclampsia as apoplectic in character. We thought there was either a very great congestion of the brain unattended by effusion, or that there was great congestion of the brain attended by effusion of blood or serum, and in the dissections of cases at that time, it was a very frequent thing to find clots of blood in the substance of the brain. Another thing that was quite remarkable then, and I think if we watch cases of that kind that die, we will now see symptoms indicating œdema of the lungs. Those lesions seem to have been the anatomical pathology of the disease at that time. We had no idea, as at present, of the *etiological pathology* of eclampsia. I do not remember that anything was taught upon the subject of etiology, especially anything separate from the anatomical conditions of which I have spoken. If we reasoned upon the subject at all, we supposed that the pressure of the uterus upon abdominal vessels and those of the chest through the diaphragm caused hyperæmia of the brain because of the partial exclusion of the blood from those vessels, both venous and arterial. Pressure upon the abdominal aorta prevented the arterial blood from being

thrown so plentifully into the inferior extremities, and diverted it to the brain. We believed that this resulted from the pregnancy, and that the full effect of the cerebral hyperæmia thus caused depended upon some constitutional condition with which we were not acquainted. That kind of reasoning upon the pathology of eclampsia led us to a practice which is very different from the practice of the present time. Tracing the disease to a congestion of the brain or to an effusion of blood in the brain, we believed the best preventive measure and the best curative measure was evacuants—something to lessen the quantity of blood in the system and at the same time prevent the large quantity of blood being thrown into the brain through the circulation, giving nature time to correct herself by delivery, &c.

I am caused to remember, since sitting here, some cases that to me were exceedingly interesting, especially in view of the therapeutics of the present time. I remember one instance of the wife of a neighbour being taken with eclampsia at the end of the eighth month, and of a very severe character. She was a strong, healthy woman, and, as was the custom at that time, I bled her sitting up, until her pulse became small and her face pale, and other evidences of syncope presented themselves; I gave her, as a thing calculated to carry the blood away from the brain, and which was a very common prescription then, croton oil. This, of course you know, produces great revulsive influence from the head to the intestinal canal, and in that way we supposed relieved the symptoms. That woman had two convulsions after she was bled the first time; then she was bled a second time in the course of two hours after the first, and she had no more convulsions; the oil also operated at that time. She went to the end of the nine months, and was delivered of a foetus that had died at the time the convulsions occurred.

To sum up my experience in that kind of treatment, I will say that I had pursued it until I came to Chicago, twenty years from the commencement of my professional career, and I do not remember that I had seen a patient die of eclampsia

until I came here. The first case I saw was in consultation with Drs. Johnson and Freer at one of the hotels here. The patient had eclampsia and was only about six months pregnant. We discussed the subject of treatment, and I was astonished, as she was a strong woman, that nothing was said about bleeding; but venesection had been dead several years in this part of the country, and I could not induce them to think that it was a proper remedy. That was the first patient I ever saw treated without venesection, and the first patient I saw die. I agree perfectly with the sentiments expressed in the paper on the etiology of the disease. I think it is perfectly rational to trace it to a kidney origin; I think that our pathological observations have proven that there is poison of some kind produced by retention of some of the constituents of the urine. Something occurs in the kidneys that prevents their depurating influence, and there accumulates in the blood a considerable quantity of excrementitious matter that ought to be eliminated, which seriously affects the nervous centres. It is an interesting thing to speculate upon, at least, if we cannot demonstrate what are the exact effects produced upon the nervous centres by the circulation of that poison through the vessels of brain and chord. While I believed that the circulating poison was carbonate of ammonia, I could easily understand its exciting influence on the brain. It is possible the same irritating effects are produced by other excrementitious substances, causing irritability of the brain that gives rise to these convulsions. I do not at all subscribe to the idea that cerebral anæmia is necessary to these convulsions in the beginning; I am sure it is not present as the case advances. These cases begin with epileptic symptoms, and they generally end with apoplectic symptoms. I believe in the beginning there is not much vascular excitement in the brain, but the terrible convulsions and the great cramps, especially in the chest, produce such a determination of blood to the brain as to produce organic effects in it.

As to my present ideas with reference to the treatment of eclampsia, I agree with Dr. Earle in the majority of his con-

clusions, and shall not express them in detail. But in the general way of treating these patients, leaving out the considerations of delivery, I believe it is better for us to begin, especially in patients of strong plethoric habit, by copious venesection. In the old days when venesection was done, we did not count the ounces of blood as a reason for bleeding no more, but we bled to produce an effect, and sometimes we bled three or four pints at a time. And I think now if we can have a patient early; and the pregnancy has not terminated, the best thing to do is to bleed to reduce the quantity of blood, and consequently reduce the force of the circulation and acrid character of the blood by the rapid absorption of lymph which follows. After this is done we should give an active cathartic to work off any accumulation in the intestinal canal and produce revulsion. During the whole time after bleeding we should keep the patient constantly under the influence of chloral. Chloroform bears no comparison, in its effects upon eclampsia, with chloral, and one reason is that you do not know how much chloroform the patient is inhaling. Certainly there is no sense in holding a sponge of chloroform to a woman when she is in convulsions, for respiration is suspended until the convulsion ceases; it is impossible to get it into her system while the air is thrown out of the lungs and the chest closed by clonic spasms, but you can give chloral by the stomach or by the rectum, and keep up its influence to a recognisable degree. These remedies must be supplemented by the treatment which Dr. Earle so intelligently presents. I think very favourably of pilocarpine. I think it is a most excellent addition, because it serves to promote the secretions to such a great degree.

Dr. J. S. KNOX : I did not have an opportunity to hear the papers, and therefore can only report my personal experience in the management of eclampsia. My introduction in medicine was under the direction of an old and skilful country doctor, who was decidedly in favour of venesection. He used to bleed in labour for irritable os, for rigid perineum, for the prodromal symptoms of eclampsia, and he always bled for

eclampsia. I never knew him to lose a case, and he told me he never had lost one when he bled early enough. I was impressed, therefore, with the idea that venesection was the treatment for eclampsia. I have always followed it, and in ten cases that have come under my observation, seven were bled and recovered, three were not bled and died. My treatment has been to bleed, as Dr. Byford expressed it, copiously, drawing from fifteen to twenty ounces of blood from a large orifice, and I never yet have seen a woman so anæmic that I hesitated to employ this method. After the bleeding, I give half a grain of morphine hypodermically, and medicines to keep the bowels and kidneys acting freely.

Dr. F. HENROTIN : I did not hear the first papers on the etiology of the disease. In the first fifteen years of my practice I never met with a case of puerperal convulsions, but in the last five or six years I have happened to come across quite a number of them, and I have in my own mind divided those cases into two varieties. On the one side are the cases that give rise to symptoms long before delivery ; cases that are accompanied by a great deal of œdema, both of the genitals and of the limbs ; cases that draw attention to the fact that albuminuria is probably present, which is usually found to be the case, and it always seemed to me that those cases having such symptoms were best treated by venesection, catharsis, and pilocarpine. On the other hand there are a few extremely severe cases occurring in patients who had shown no œdema, who usually had shown no symptoms whatever before delivery, but were supposed to be perfectly healthy, and in whom the convulsions occurred either at the time of labour or several hours afterwards. In two of these cases I have seen venesection tried without any effect whatever, while, in the cases that gave rise to œdema, venesection, which has always been followed almost as a routine practice by me, has always seemed to be of a great deal of benefit. Those patients that were affected very late in pregnancy or after delivery, that did not give any symptoms whatever where albuminuria was not present at all, seem not to have been

affected in any way whatever by venesection, but seem to have been helped by morphine and narcotics; while those that resembled more particularly cases of the uræmia that we get after scarlatina, those cases of supposed large, white kidney in which albuminuria is a prominent symptom, those cases seem to be affected favourably by venesection, and in such cases coming under my observation, with one exception, all recovered.

In regard to drugs in this disease, I would say that I believe from personal experience that the giving of pilocarpine hypodermically, while the patient is unconscious, is capable of actually drowning the patient by the excessive flow of saliva and increased pulmonary secretion, so that I would advise caution in its administration when the patient is unconscious.

Dr. H. P. MERRIMAN : We all realise the extreme importance of this trouble, and it seems to me that what has been said during the evening covers almost the whole ground.

There are one or two additional thoughts, however, of very little importance probably, that have been running through my mind as I have been listening to the papers and discussion. One of these is that we have, I think, cases of convulsions in puerperal women that are like the cases of convulsions in infants, not due so much to direct blood poisoning, and not due so much to centric lesions as they are to irritations that are remote from the nervous centres. I cannot help thinking that sometimes we have, from the irritation of the gravid uterus, a certain amount of trouble that would be removed simply by the removal of the foetus from the uterus. I do not think that this has been mentioned as a cause of the convulsion, although we are referred to it in the treatment of the disease. But it strikes me that, as often the ingesta of infants has produced convulsions by its irritation of the intestinal canal, so we find that there is a state of irritation of the nervous system from the presence of the foetus, acting as the cause of convulsion. The remedy has already been mentioned—that of delivering the child.

I have been so fortunate as to have very few cases of puerperal convulsions. I have had one fatal case, and only one, and this was in a woman whom I had attended in a previous confinement in which she had convulsions, and in which the use of chloroform and rapid delivery by forceps was sufficient to stop the convulsions, which did not return; the child also lived. But in her next pregnancy, about two and a half years later, she had a sudden attack of convulsions at six months. I was sent for, and found her having one convulsion after another. I called in Dr. Roller in consultation, who came, and we went to work and delivered her as soon as possible. There was a reasonable amount of flow from the uterus after delivery, but the convulsions continued; she never rallied from them, and died about six hours after the delivery of the child. She was not bled, nor were any of my other cases, because I had a different view then from that I have now. I had been permeated with the belief that other remedies were better than venesection, and I neglected to use venesection, as I would not do at the present time. But I still believe there are many of these cases that do not call for venesection; many of them are hysterical, due to extreme nervous excitement on the part of the woman. There is not a great vascular tension, and the call is more for sedatives, anæsthetics, and for evacuating the uterus than for blood-letting.

Dr. ELY McCLELLAN, U. S. A. (present by invitation): A medical officer in the army has of necessity but few opportunities of seeing these cases, but even in our isolated lives occasionally great emergencies come upon us. I can simply speak as far as my experience goes in such cases, and it is limited, but it is decidedly in favour of the use of chloroform and of rapid delivery. The few cases that have occurred in my experience have terminated favourably by the induction of labour, by version carefully performed and as rapidly terminated as possible. Then the therapeutic indications are those which have been laid down. Only three or four cases, in a service of nearly twenty-one years, have fallen to my lot,

and with the treatment outlined they have all terminated favourably.

Dr. W. W. JAGGARD, in closing the discussion, said: It is scarcely possible to accept everything that Dr. Bayard Holmes has said. Normal urine is toxic, and when injected into the veins of rabbits it will produce convulsions.

It is possible that in certain cases the nephritis of pregnancy may be an example of infection. But the sporadic occurrence of the disease, the apparent selection of primiparæ, and cases of multiple pregnancy, tend to show that the operation of this factor is not general. Staude calls attention to the predisposition to the disease, observed in case of pelvic contraction and where the foetal head is of uncommon size. Pressure on the pelvic blood-vessels causes an increase in the general blood-pressure, that ultimately reacts upon the kidneys. Eclampsia appears among the rich and poor alike. Its victims are oftenest young, healthy, blooming women, in whom it is reasonable to suppose the physiological resistance of the tissues is not notably lessened.

Dr. Nelson and Dr. Merriman have touched upon an important item in prognosis. What is the probability as to recurrence of eclampsia in subsequent pregnancies? A guarded answer must be returned. In general, eclampsia in a first pregnancy seldom means a recurrence of the disease in succeeding gestations. When all symptoms of nephritis disappear within a short period after delivery, the probability of immunity becomes almost a certainty, so that eclampsia in a first pregnancy, *per se*, is not an indication for the prevention of conception, nor for the induction of abortion. If, however, symptoms of Bright's disease, no matter however latent, persist, the patient should be warned against conception. In case of conception and the development of albuminuria early in pregnancy, I am of the opinion that the induction of abortion ought to be seriously considered.

The value of the hot-water bath is greatest in the prevention and least in the cure of eclampsia. Used as described by Dr. Earle—the Vienna plan—it is by far the most efficacious procedure that we possess in the prophylaxis of the disease.

As to the treatment of eclampsia during pregnancy, the weight of evidence and opinion is decidedly in favour of an expectant plan of treatment, unless abortion or premature labour is imminent. Wait until the seizures are well over and until convalescence is established before interrupting pregnancy. If, however, abortion or premature labour is imminent, the indication is to aid in the evacuation of the uterus.

In eclampsia, during labour, three indications are clear : 1st. After the insertion of a gag and the protection of the woman's body by pillows and the like, the indication is to control the convulsions by profound narcosis. The choice of remedies is not so important as that the narcosis shall be deep and continued. Chloroform is by far the best agent to control the seizures, while the narcosis can best be maintained by large doses of chloral and the bromides exhibited *per rectum*. Winckel,¹ who relies exclusively upon chloroform inhalations and chloral *per rectum*, has had only seven deaths in ninety-two cases. As at present informed, this result is better than that obtained by any other plan of treatment on record.

2nd. The second indication is to evacuate the uterus as rapidly as may be consistent with the safety of the mother and child. Experience teaches that the convulsions cease when labour terminates in about one-third of the cases, in one-third they grow less frequent and severe; only in the remaining one-third do they continue without change.

Early in the first stage of labour, before effacement of the cervix and dilatation of the os, puncture of the membranes is commonly the best means to accelerate labour. The escape of the liquor amnii is not infrequently followed by an abatement of the convulsions. Later in the first stage, after effacement of the cervix, digital dilatation of the os externum is often indicated. It is seldom necessary to incise the os externum.

Delivery may be completed by the forceps or version and extraction, according to the conditions of the concrete case.

3rd. The third indication is to eliminate the retained excre-

¹ Lehrbuch der Geburtshülfe, 1889, p. 590.

mentitious products of the urine by diaphoresis, purgation, and diuresis. The hot-pack is probably the best means. I think Dr. Earle will encounter some difficulty when he attempts to put an eclamptic in the hot-water bath, besides running the risk of drowning his patient. The vapour bath, by means of the alcohol lamp, is efficient and easily exhibited. Pilocarpine must be used with extraordinary caution only in the beginning of the disease, when the coma is light, the pulse full, and the respiration free. Deep coma, weak heart, and beginning œdema of the lungs are absolute contraindications. The evidence upon this point, brought forward by Fordyce Barker, Kleinwächter, Sänger, Welponer, Schramm, Klotz, Carl Braun, Winckel, Schroeder, and others is decisive. The unqualified praise this remedy has received this evening must be taken *cum grano salts*. Dr. Henrotin is right in saying there is grave danger of drowning the woman in her own secretions.

Finally, there comes the question of bleeding. Nearly every Fellow of the Society is present to-night and has taken part in the discussion. Every speaker has commended bleeding in the strongest possible terms. There may have been slight differences of opinion upon other points, but all unite upon the item of venesection. Bleeding is the specific treatment of eclampsia. But no one has given a reason why he bleeds, neither has any one presented a series of cases that demonstrate the value of phlebotomy. There are at least three good reasons why we should not bleed in urinemic eclampsia. 1. The procedure is without important effect upon the demonstrated cause of the disease. The amount of excrementitious material that can be eliminated by bleeding is comparatively trivial. Blood-pressure cannot be depressed for any considerable period of time, unless the patient be dangerously exsanguinated. Hæmorrhage into the brain as a consequence of puerperal convulsions, is an extremely rare finding. The indication for bleeding in eclampsia is not stronger than in the convulsions of Bright's disease in the male and non-pregnant female. None of the Fellows present, I am certain, would bleed in the latter affection.

2nd. Clinical experience teaches that much better results are now obtained without bleeding than were formerly observed when venesection was commonly practised. In support of this proposition, the verdict of the Vienna (Kucher) school of obstetrics must be cited: "In the Vienna clinics, where the results of treatment are far better than anywhere else," blood-letting has been completely discarded. Winckel's (Munich) statistics have already been mentioned—ninety-two cases, seven deaths. In Schroeder's clinic (Berlin) bleeding is no longer practised, on the ground that better results are obtained since its rejection.

3rd. The weight of opinion is opposed to venesection. In this connection, names are to be valued like coins. C. Braun, Gustav Braun, Josef Spaeth, F. Winckel, Schroeder, have expressed themselves in no equivocal terms as opposed to blood-letting.

If blood-letting in eclampsia is unphilosophical, if it is opposed by clinical experience and the weight of professional opinion, upon what grounds can this practice be tolerated? If the Fellows must bleed, let them "bleed the woman into her own veins" by the use of *veratrum viride*.

The experience of one individual in private practice or in our small lying-in hospitals does not count for much. It can have but slight weight in influencing the conduct of others. Yet, as the personal experience of each member has been the basis of his remarks this evening, I feel like adding my own testimony. Up to the present, in about thirty cases of eclampsia, I have not observed a clear indication for venesection. My observation of the cases of others in which bleeding was allowed has failed to convince me of the value of the procedure. Some of these cases were a little remarkable, and cannot be fairly cited in this connection, since at the same time with free bleeding the patient's blood was saturated with chloroform, morphine, chloral, and the bromides. It was a question as to the cause of death, whether it was the Bright's disease, the bleeding, or the artificial toxæmia.

In the treatment of eclampsia one item has been neglected.

It is necessary to use all precautions against septic infection that so frequently occurs.

On Supra-vaginal Amputation of the Uterus.

By Dr. PETR. A. RAKUZA (Odessa, Russia.)

The author has made the operation in twelve cases. In nine of them it was resorted to on account of uterine fibromyomata; in a tenth case on account of hæmatometra with hæmatosalpinx and hæmatocolpos; in an eleventh, the amputation became necessary in the course of an unusually difficult double ovariectomy, where there were met with extensive and extremely dense adhesions of cysts with the broad ligaments and womb: in the remaining case, Porro's Cæsarean section for osteo-sarcoma of the pelvis and femur was performed. In seven cases the operation was made after an extra-peritoneal method (first described by Kleberg in 1875), all the patients making good recovery. In the other five cases, an intra-peritoneal operation was performed, with three recoveries and two deaths from peritonitis. Dr. Rakuza's general deductions are these: 1. The extra-peritoneal method gives by far better results than the intra-peritoneal. 2. Even under strictest antiseptic precautions the intra-peritoneal amputation is always associated with the danger of a secondary infection (through the cervical canal). 3. The operation is justified only in cases of pedunculated fibroids and in such ones where the stump is very short.—(*Transactions of the Third General Meeting of Russian Medical Men at St. Petersburg, 1889, No. 10.*)

CORRESPONDENCE.

To the Editor of the British Gynæcological Journal.

DEAR SIR,—In Part XVII., May, 1889, of the BRITISH GYNÆCOLOGICAL JOURNAL, I find a critical review of my book, "Principles of Gynæcological Operations," published about a year ago.

The name of the writer not being mentioned in the article, I take the liberty of addressing you, as the editor, kindly requesting you to publish these lines in one of the next numbers of your Journal.

It is not the general verdict expressed on my book that compels me to the following remarks; it is, moreover, the fact that your reporter seems to have misunderstood altogether the object of the book, such as I exposed it in the preface.

The object I had in view was to offer to German students and to such German physicians as are not specialists, a brief and clear survey of the present state of German operative gynæcology. This being my object, it need not be explained why I neither dwelt upon new operative methods—of which we possess as yet no practical experience—and why I avoided mentioning original ideas and literature. It was, therefore, my full intention to leave out all foreign quotations, always referring the reader, desirous of further information, to the extensive treatise on gynæcology by Billroth and Luecke. In this book each special subject is treated of at length, whereas mine, if filled with a great number of quotations, would have missed its purpose of giving the beginner a general survey.

The writer, in referring to my chapter "On Inversion," says that the application of continuous elastic pressure in the treatment of these cases is unknown to me, and that I, therefore, take resource to the deplorable expedient of amputating the uterus. Now it being my object to write on *operative* gynæcology, my task was to dwell upon operative measures only, and not upon other therapeutics. Besides, the writer can impossibly have properly read the chapter in question, otherwise he could not have overseen that, after attributing

the greater space to the description of non-operative therapy for inversion, I expressly mention that all cases I had seen were cured without amputation.

As to the disapproving remarks of the writer about the dorsal position being the mode of examination generally employed in Germany, I am happy to see that at the meeting of the British Gynaecological Society on June 23rd, the President of the Society, Mr. Macan, my honoured friend, warmly recommended the very same chair the illustration of which, on first place, was so much to the dislike of the writer.

These are, however, things I attach but little value to; the principal cause for my remonstrance being the remarks full of unmistakable irony and exaggeration in regard to the antiseptic measures I employ before beginning an operation—measures “destined to give his countrymen a fair picture of German bacteriophobic gynaecology.” He lays stress upon the fact that the results obtained in England, “under the strict rules of cleanliness,” are certainly not worse than those of German operators. Now this is but a controversy of words. Why do the English gynaecologists adopt cleanliness? Certainly in order to remove the dirt which, as Mr. Lawson Tait declared some time ago, is the source of infection. But what is dirt? If you disinfect or sterilise it, it always remains dirt, but it will heal in any wound without harm. Thus, what is the pernicious thing in dirt? Certainly the germs which we destroy by disinfection, or by sterilisation. Now it is, I believe, a general adopted opinion, also in England, that these germs are not always bound to visible dirt, and cannot always be removed by superficial cleaning. Opinions differ only as to the manner and to the degree in which this cleaning is necessary. The writer exposing the question to his readers as he does, in saying that I recommend to scrape away the surface of the vaginal mucous membrane, in order “to destroy the function of the vaginal glands” (which according to him are “a terror” to me), certainly attributes to me quite wrong anatomical principles. The existence of such glands in the vagina is unknown to me, and the writer ascribing to them the physiological function “to supply a protective medium and elimination” must refer to other anatomical investigations than are known to us in Germany. The statement, however, that I recommend a scraping of the mucous membrane “to make a traumatic surface” is wrong altogether and exaggerated. I doubt whether any British operator would perform plastic operations in the vagina without first thoroughly cleaning the parts to be operated upon.

Maintaining that the results obtained in England by simply adopting cleanliness are as good as those of the bacteriophobic German gynæcologists, is an assertion which, in its generality, naturally cannot be controlled, the external conditions not being always the same. The majority of German gynæcologists must, however, have been led to the conviction that with strict aseptic measures their results were better still than those obtained before simply with cleanliness. The great improvement on the mortality of total extirpation of the uterus, I mentioned, for instance, is a fact which very much speaks in favour of my argument. Besides it is not only the German gynæcologist who finds it necessary to take minute aseptic precautions before beginning an operation. The same volume in which the critic of my book appeared, contains a paper from the *Archives of Gynæcologie*, "Aphorisms in Aseptic and Antiseptic Gynæcology," by J. T. Merriwether—an essay which I hope the reporter will find opportunity to study.

The reporter finally, speaking of castration, says: "The author attributes strangely enough a quasi-priority to Hegar over Battey." Now this was quite surprising to me. In my book, page 315, may be found the sentence: "Without entering into the history of the operation, I only mention that castration was first performed nearly at the same time in 1872 by Hegar, by Tait, and by Battey."

Yours truly,

M. HOFMEIER.

*Medical Professor on Gynæcology and Obstetrics
in the University.*

Würzburg, April 24th, 1889.

[We willingly publish Dr. Hofmeier's letter. We do not think it necessary to answer his objections *seriatim*. A calm perusal of the review, and of the letter, will shew that the criticisms are not shaken. Dr. Hofmeier states that his object was to offer to German students a brief survey of the present state of German operative gynæcology, and therefore left out all foreign quotations. Therefore criticism was misplaced. A reviewer cannot review motives; his duty is to discuss the matter and execution of a work. It can hardly be admitted that the desire to teach German students German operative gynæcology should shield the book from criticism, or justify neglect of fair reference to the work of others.—ED., B.G.J.]

To the Editor of the British Gynaecological Journal.

SIR,—In your last issue of the Journal you stated that I had resigned my position as Physician to the Chelsea Hospital for Women. This is not the case, Doubtless the error arose in consequence of my having resigned the post of Obstetric Physician to the Middlesex Hospital.

I shall feel obliged by your inserting this notice in your next issue.

Yours faithfully,

ARTHUR W. EDIS, M.D.,
*Senior Physician to the Chelsea Hospital
for Women.*

22, Wimpole Street, W.

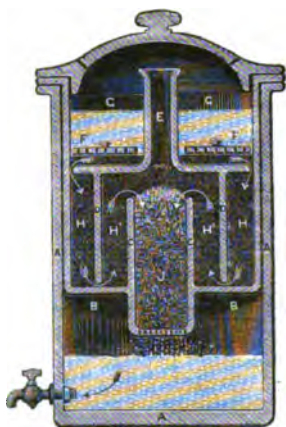
NOTES.

THE gynæcological world sustains a distinct loss by the death of August Breisky. This celebrated gynæcologist died on the 25th of May, 1889. Last autumn he was taken seriously ill, and succumbed at the end of about six months' suffering. He was professor at the Clinic at Prague. He was author of *Über die Entwicklung rationeller Anzeigen zur Extraction bei Beckenendlagen: Über den Einfluss der Kyphose auf die Beckengestalt*—a work which added much to his reputation. In addition to the above he published many papers in the *Archiv für Gynäkologie*. In the year 1886 he took the direction at Vienna of the Späthsche Klinik, and helped to found the Obstetrical and Gynæcological Society of Vienna. He was deservedly popular, and is much regretted in Vienna.

Report to the Surgeon General on Leprosy and the Leper Asylum, for the year 1888, by Dr. Beaven N. Rake, M.R.C.S., L.R.C.P., M.B., M.D., Government Superintendent.—"I have lately been trying Jeyes' fluid (Creolin) a good deal at the Asylum. In 5 per cent. solution I find it rapidly heals the eczema so often complicating leprosy. It also is an excellent stimulant for indolent leprosy ulcers. In case of gangrene it completely reduces the smell. After excision of leprosy tubercles, I find pure Jeyes' fluid (Creolin) useful as a caustic to hinder recurrence. I am still making observations."—*Trinidad Royal Gazette, May 1st, 1889.*

THE Morris circulating filter is a distinct advance in the art of removing impurities from water which is to be used for drinking purposes. It has been invented by Mr. Morris, the well-known inventor of the Morris tube for facilitating practice with rifles of all calibres. The filter consists of an arrangement in two parts by which the water to be filtered is made to descend, ascend, and finally descend

again through a bed of manganous carbon. It can easily be cleaned and re-charged with fresh manganous carbon by any domestic servant. We have inspected the filter and seen it in use. It is by



far the best and most efficient filter we have seen. It is sufficiently cheap to be within the reach of all who like pure water, the small one gallon size in Doulton ware being fourteen shillings.

WE, the undersigned, do hereby give notice, that according to the resolution passed at the Washington meeting, September 9th, 1887, the tenth International Medical Congress will be held in Berlin. The Congress will be opened on the 4th, and closed on the 9th day of August, 1890. Detailed information as to the order of proceedings will be issued after the meeting of the delegates of the German Medical Faculties and Medical Societies at Heidelberg on the 17th of September in the current year. Meanwhile, we should feel sincerely obliged, if you would kindly make this communication known among your medical circles, and add at the same time our cordial invitation to the Congress.—VON BERGMANN; VIRCHOW; WALDEYER; Bureau, Berlin, Karlstrasse 19.

THE BRITISH GYNÆCOLOGICAL JOURNAL

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THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, MAY 22, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT : 27 Fellows, 3 Visitors.

The following were elected Fellows of the Society :—Dr. Mellor Light, Dr. Ralph Worrall, and Dr. Godfrey Forrest Reid. The following was proposed for election :—J. H. Kellogg, M.D., Battle Creek, Michigan.

Dr. EDIS showed an ordinary ovarian cyst which he had removed. He said the cyst presented no especial interest, but it was strangulated, and that necessitated an operation. The clinical history of the case was of some importance. The patient was sent to him by Dr. David Berry, who stated that she was 30 years of age, and had been married several years. She had been delivered of a healthy female child on the 18th of March last—two months previous to the operation. Labour was normal, but after it was over the abdominal swelling remained to such an extent as to lead her medical attendant to think there was another baby. She, however, made a good recovery in other respects. During pregnancy the patient had a good deal of trouble : one child had scarlet fever and another had bronchitis, and

during this time she suffered from severe aching pain in the abdomen. On Saturday, the 11th inst., she felt very unwell, and soon afterwards she was seized with a severe pain shooting down the left side of the back. This subsided, but came on again on Sunday, the 12th, when she was in frightful agony. The abdomen, however, was not at that time particularly painful to pressure. Dr. Berry saw her later in the day. The pain was then easier. The pulse was 120 per minute, and the temperature 101° F. On Tuesday morning, forty-eight hours after the commencement of the attack, the pain was severe and intermittent, the temperature 104°, and in the afternoon sickness was well marked and exhausting. Dr. Aveling saw her at 3 p.m. on Thursday the 15th, and formed a diagnosis of strangulated cyst from twisted pedicle. At that time the pain was absent except during the attacks of vomiting. This continuing, it was considered desirable to operate, and she was admitted on the Friday. She was carried upstairs in a very exhausted condition. She had been vomiting persistently ever since Tuesday morning. The pulse was weak and thready, and there was every reason to believe that she would not have gone on very long in that condition. On opening the abdomen Dr. Edis found a dense cystic mass, almost black in appearance, and evidently ovarian. On passing one's hand round it, it felt as if the spleen were tacked on to it—due apparently to an effusion of blood between the layers of the cyst wall. It was punctured, and over a gallon of dark, inky, greenish fluid was withdrawn. The tumour was then eased out of the wound, and the pedicle secured in the usual way. He said he did not wish to lay any stress on the operation, but the case was a good example of a class of cases which he thought would turn out to be far more common than one might be willing to admit. Dr. Berry had given them a very concise and complete history of the case. He said that one could only regret that the patient should have been allowed to go on from the Saturday until the following Friday without recourse being had to operative interference. On

Tuesday morning the condition of the patient was already very serious. She was unable to retain anything on the stomach, and her condition was calculated to inspire considerable anxiety. Dr. Edis washed out the peritoneal cavity well with water at a temperature of 110° F., and the wound was closed in the ordinary way. It was now the seventh day after the operation, and the patient was doing very well. The sickness had persisted for two or three days after the operation, but the patient's condition manifestly improved. They kept her for some time upon zymised suppositories. He mentioned that his instructions were to give the patient a sixth of a grain of morphine if the sickness continued, and then follow it up with food in a short time. This was a very useful procedure in certain cases of inability to retain nourishment.

Mr. LAWSON TAIT observed that in the course of a recent discussion at a meeting of that Society the question had been raised as to whether it was the twisting or the hæmorrhage that gave rise to the shock. He said the question was still undecided whether one or the other of these conditions was responsible for the shock. His own impression was very strongly in favour of the view that it was the twisting and not the hæmorrhage that gave rise to the shock.

Dr. BARNES confirmed Mr. Tait's conclusions. He mentioned a case to which he had been called at Croydon. There was hardly any hæmorrhage, yet the woman succumbed to shock before he got to her. He said that this was an important point to be decided, and also as to how and under what circumstances this twisting of the pedicle took place. He asked whether it took place in that case before, during or after labour. He thought it could hardly have been after. He said he had seen it occur in several cases during pregnancy, and he suggested that the uterus growing under the large tumour would catch it on one side and lever it round. In Dr. Edis's case he thought it might have occurred during labour from the contraction of the muscles.

Dr. R. T. SMITH said that Dr. Edis could not be expected

to wait until the shock had passed off. The patient had been ailing for six days. He mentioned that he had seen another case of twisted pedicle, and the surgeon operated immediately and the patient made a good recovery. He asked whether there was any peritonitis in Dr. Edis's case.

Dr. PURCELL asked whether the patient was so debilitated as to justify transfusion or the intra-venous injection of a saline solution.

Dr. EDIS, in reply, said there was evidently a considerable amount of altered blood in the cyst, and in addition to that, on one side there was a very marked effusion of blood between the layers of the cyst walls. He agreed with Mr. Tait that the twisting was sufficient to account for the shock. In this case the tumour was apparently twisted one and a-half times round. With reference to Dr. Barnes' question as to whether the twist took place during labour, he thought that the history of the case answered it. She was delivered on Monday, the 18th March, and the swelling remained, and the patient did well and continued so until Saturday, May 11th, which was a very long period of time. She then felt very well, but was suddenly seized with pain. He said that if they had waited for the patient to come round from the shock they would probably have had to send for the undertaker and do a *post mortem* in due course. He declined to admit that it was ever desirable to wait for the patient to rally from the shock. He said there was very distinct evidence of peritonitis, and this was further made apparent at the time of the operation. He said that transfusion could have been of no service to the patient in her condition.

Dr. R. T. SMITH said that within the last four weeks he had seen four cases of tumour in the broad ligaments, and as once or twice the question had been raised as to what should be done with them, he had thought it worth while to bring them before the Society. The first was a small simple cyst of the broad ligament with a distinct pedicle. There was no difficulty in the case. It was only interesting to those who had not seen many of them. The second was a large ovarian

cyst of the broad ligament, which had been removed by one of his colleagues ; it had a distinct pedicle, and so was easily dealt with in the ordinary way. Another tumour, the size of a duck's egg, was found on the opposite side, but this was imbedded in the broad ligament. It was treated by laying it open, stitching the edges to the abdominal wound, and leaving a drainage tube in the sac. The case had done well, but it had been somewhat tedious in healing. He had also seen a third case treated in a similar way.

In the fourth case he showed some ligatures which had come away from a patient upon whom he had operated last December, and he asked the Fellows what ought to be done in such cases. The facts were as follows : the patient, aged forty-three, came with a history that sixteen years ago she was under Mr. Scott, who said she had a fibroid tumour on the right side. At the operation she was found to have a tumour reaching up to the umbilicus, and on tapping this a clear fluid escaped, and they found a big sac dipping down into the pelvis. The pedicle involved the uterine fundus for quite two inches, and also extended into the left iliac wall. There was no difficulty in separating the cyst from its outer envelope, and no bleeding of consequence. The question arose as to whether the sac should be stitched to the abdominal wall and drained, or whether it should be tied and left in the abdomen. The question was a very critical one. He decided to tie it, which he did in three places. Unfortunately the ligature slipped, and the second time he had to tie the uterine tissue, so that the sutures had to be thick and strong. A drainage tube was inserted into the abdominal cavity and removed the next day. The patient did very well indeed for the first week ; so far, there was no cause for anxiety. But at the end of the week they found the dressings completely saturated with a brownish fluid, and the wound continued discharging for three months. The patient left the hospital and went to the sea-side, using an india rubber drainage tube. In March, however, she came back, and he found a sinus six inches deep. A few days later the first of

the ligatures came away, and a fortnight later the stout one in three loops, almost unchanged. Ten days after that the sinus was perfectly healed. The patient's health had been good, and the cure was complete; but he thought in such a case it would have been wiser not to have tied up the sac so completely, and to have left a drainage tube in its interior. He wished to elicit what had been found to be the best method of treating such cases.

Dr. INGLIS mentioned a case sent in from the out-patient department. They had a consultation, but no one diagnosed the exact condition. It was a unilocular cyst of the broad ligament, and in that case there was no difficulty about the pedicle.

Dr. BANTOCK said he gathered from the remarks that had fallen from the previous speakers that the case was one of a cyst with a very broad base, and he did not quite understand whether Dr. Smith had enucleated the cyst proper, leaving the envelope. (Dr. SMITH: Yes.) He said his own practice was simply to shell out the cyst from the wall proper, and if the base was so large as to make it unsafe to ligature, he stitched the sac to the parietes, only leaving as much as was necessary. Sometimes they had to fold the cyst several times on itself, and it was desirable to get it as nearly down to the end of the wound as possible. Sometimes it was advisable to pass the sutures twice round through the parietes and the cyst wall, so as to get a broad surface of attachment, giving a stronger hold to the envelope. The drainage had proved perfectly satisfactory in these cases. He said that it was probably a very hazardous proceeding to attempt to ligature such an extensive mass of tissue as would be required in such a case as the one before them. He had never found it necessary to use anything stronger than No. 5 Chinese silk, and as a rule No. 4 was strong enough to bear any strain they might bring to bear upon it.

Mr. TAIT said there could be no doubt that it was a piece of very bad surgery not to enucleate these cysts. Dr. Smith had shown them a cyst of the broad ligament that was easy to

separate from its capsule, and he said that all cysts of the broad ligament could be easily shelled out. He had never had the slightest difficulty in enucleating them. Only the preceding day he had enucleated one which went right up over the left kidney, but they had nothing but the free surfaces in contact. All they had to do was to open the capsule and shell out the cysts. He said he was amazed to hear a Fellow of that Society talk about cutting off the top of a cyst and stitching it to the parietes. Most women would die from the effect of the suppuration. He said he spoke plainly, because the subject required plain speaking. Since Dr. Myer's paper he had abandoned all that absurd practice. He said he had enucleated seven or eight from patients treated under the old system. If they got the cyst properly out, then drainage was a matter of the greatest ease. They put the drainage tube into the pocket of cellular tissue, and then healing took place. He added that it was a matter of indifference whether they stitched the cyst to the abdominal wall or not, and no matter what the difficulty might be with regard to hæmorrhage.

Dr. EDIS alluded to a point of practical importance. He recalled two cases in his own experience where the ligature broke, probably from its having been soaked in some anti-septic solution, and they were obliged to resort to a stouter ligature. One case was that of a lady from Brussels who complained bitterly of the formation of abscesses. That was two years ago, and the abscesses still recurred, and he was very much afraid that they were due to the non-absorption of the thick ligatures. In another case he had used much thicker silk than he generally employed, and he feared that to this day that poor creature had a sinus. The moral of all this was that they ought not to employ too stout ligatures. Nos. 4 and 5, if used with due care, were quite stout enough for all ordinary purposes, and the instance brought before them by Dr. Smith was proof that silk ligatures did not become absorbed quite so easily as they might imagine.

Dr. HEYWOOD SMITH mentioned a case of a patient with

a sinus which persisted all the time she was in the hospital, and she attributed it to the house surgeon having used a probe. It existed for a year or two and at last she returned bringing the ligature which had come away, and since its extrusion she had been quite well. He mentioned with respect to this case that curiously enough this woman was sterile during the greater part of her married life until she had ovariectomy performed, but soon after that she had a child.

Dr. R. T. SMITH, in reply, said he had thoroughly enucleated the tumour, and then tied up the envelope. Having had visitors ask questions on the best way of treating such cases, he thought it well to bring it before the Society.

Gynæcological Specialism and General Practice.

BY THOMAS M. DOLAN, M.D.

IT would be singular indeed if the medical profession escaped from the action of what I might term the general forces, which have of late years so acted upon manufactures and the arts, as to bring about in these a degree of specialism unknown, and even undreamt of, by our ancestors. It has not escaped, and my object to-night is to attempt to prove that those who are engaged in general practice have no reason to complain of the growth of gynæcological specialism which has followed on the line of progress and of evolution, for general practitioner and specialist have still their rôles, and are mutually interested in the development of the study of the diseases of women; nay, more, I would assert that by linking themselves closer with such a Society as the British Gynæcological, and by digesting the experiences which the leaders in gynæcological practice so readily place at their disposal, general practitioners can thereby better qualify themselves for that position which, if I read rightly the signs of the times, they are likely to hold in the future. It is nothing new when I say that the prospect of the future

appears to hold out almost a certainty, that the differentiation in the ranks of the profession will be of such a nature that we shall have two orders: first, a family physician or medical attendant, who will have the general care of the public; and, secondly, that we shall have behind them an order who devote themselves exclusively to the study of a single part or parts of the body. It is a growing opinion that the specialist should for some years be a general practitioner, and that then by predilection for some individual organ or part of the body, he should take up that as his speciality. It is doubtless true that we have a number of specialists who have not been in general practice, but they have served a similar apprenticeship in connection with general hospitals, and, *mutato nomine*, the end is similarly achieved, experience being required which determines the value of the specialist in our eyes.

The signs of the times appear to me to point to this, and I cannot help thinking that such a change will be conducive to the best interests of our patients, for after all, and above all, that is the chief point. The field of medicine, and especially of gynecological medicine, is so vast that it is only permitted to the general practitioner to have sufficient knowledge to treat the ordinary diseases of womankind; at the same time he should be able to accurately diagnose those conditions, for the relief of which he should seek the aid of those who have taken up the speciality, and what those conditions are we shall subsequently see in the outline survey I shall give. The field of general practice, so far as the diseases of women are concerned, leaves to us an enormous scope of work almost sufficient to satisfy any ordinary ambition; and if we are sufficiently qualified to faithfully, judiciously and scientifically carry out the treatment of the general ailments of women with minor surgery, we may congratulate ourselves—even though we cannot lay claim to major operative honours—that we are in some measure contributing to the advance of gynecology, and to the happiness of that sex to which our study is devoted. The diseases of women and children have

from time immemorial been associated with general practice. In fact there would be nothing worthy of the name if we took away these classes. By the practice of obstetrics we in the first place obtain a firm hold in family practice, and the subsequent attendance follows almost as a matter of course.

I shall briefly allude to some groups of symptoms about which we are commonly consulted, and submit some reflections upon them from the general practitioner's point of view. Disorders of menstruation take first place. Here in connection with this most important function we have almost the commencement of our gynæcological work—in advising and laying down, under normal conditions, the hygiene of the period. Apart, however, from normal menstruation, a large number of conditions or symptoms, as amenorrhœa, dysmenorrhœa, menorrhagia, metrorrhagia, fall under our notice, calling for the highest diagnostic faculty and experience. The general practitioner who aims at really securing the confidence of his patients should be well grounded in the causes which lead to any of these states, and here he will find that even with such a symptom as amenorrhœa he will have a wide scope for philosophising. He will have to enlarge his mental vision, not looking at it as simply demanding the exhibition of that great panacea, "iron," or the use of that implement of destruction, the sound, but as calling for a philosophical enquiry which will embrace all the elements of the gynæcological A B C—for if he in the one case gives iron for a case of amenorrhœa, depending on absence of the ovaries and uterus, he will cover himself with confusion; if he uses the sound when amenorrhœa depends on pregnancy he will be guilty of criminal abortion.

This mistake has been made not only by general practitioners, but by physicians and surgeons of repute, and here I would remind you of the words of a song which was written for the lover and not for the gynæcologist, but which are applicable to both :—

I know a maiden fair to see,
Take care, take care ;
She can both false and friendly be,
Beware, beware,
She is fooling thee.

The air of innocence assumed by some patients who come to us with amenorrhœa ; the social surroundings of the patient may put us off our guard, but we should ever remember the possibility of pregnancy.

The other possibilities opened out by amenorrhœa are very wide. From simple anæmia as a cause, we touch conditions which will require operation, such as when we have associated with this state, vaginal or uterine atresia, with which we may have reflux of blood into the fallopian tubes, with even rupture and escape of blood into the peritoneum. This condition is supposed to be rare, but none the less is it our duty to be mindful of these conditions and make our diagnostic range so comprehensive as never to admit a consideration of the possible. Intra-peritoneal hæmorrhage in the virgin I believe to be more common than we imagine, and to be the unsuspected cause of many deaths. The local morbid conditions associated with amenorrhœa, or causing it, such as ovarian tumours, peritonitis, parametritis, ovaritis, apart from other causes associated with anæmia, should all pass under our mental ken. Thus alone can errors of diagnosis be avoided.

Here I would observe in reference to the therapeutic treatment of one single symptom, associated with amenorrhœa, that I think the value of iron is over-estimated, and that the routine pill of doses of sulphate of iron has little or no value. Iron represents strength, and its routine prescription appears to me to depend very much on an association of ideas rather than on its practical efficacy. Apart from the hygiene proper to anæmic conditions I set a very much higher value on arsenic and nux vomica. Next in frequency to amenorrhœa, dysmenorrhœa engages our attention, a condition taxing our patience and knowledge, depending, too,

on many and varied cases, for the relief of which some minor manipulations are required. From this to menorrhagia and metrorrhagia is but a step, as well as all the other hæmorrhages which may take place upon the sources of which we should be fully informed, and upon which we shall have to make a differential diagnosis. Here I would emphasise the value of an observation of Dr. Edis, "that where hæmorrhage from the uterus persists unnaturally, and where the ordinary medicinal agents fail in affording relief, and where there is no evidence of any condition external to the uterus, the cervix should be dilated, and the uterus explored."

The methodical examination of the group of diseases I have thus described, conducted on sound principles, observations being duly recorded and deductions drawn therefrom in accordance with the strict rules of logic, will conduct the practitioner to a sound verdict, and enable him to differentiate between those conditions he can positively relieve or cure, and those which are abstruse and beyond his skill.

Next, if not in importance, certainly in point of number, we have to deal with another group—viz., uterine displacements—about which so much has been written, and on the proper treatment of which there is the widest disagreement. The number of pessaries figured in our surgical catalogues are not only an *opprobrium* to general medicine, but to the art we cultivate. It has always been a puzzle to me why men allow their names to be attached to modifications of instruments which in themselves do not possess the slightest utility, and none for the original purpose for which they are designed. Do we not attach an undue importance to the various deviations to which the uterus is necessarily liable, owing not only to its anatomical position, but to individual peculiarities? I may be here giving you old wine in a new bottle. Boulard, in his report on uterine deviations, 1854, states that in the fœtus there normally exists uterine flexion. In 107 cases he found 98 antiflexions. Aran found antiflexion in half the young people he examined, whilst Schultze, our latest writer, asserts that antiflexion is the normal condition of the uterus.

The symptoms which are said to be associated with the various versions and flexions are so numerous that they really embrace all the common diseases of life, and if they depended on these displacements there are but few women who would be able to do without a pessary. The anomalous pains and aches to which women are liable can be legitimately traced to other causes than either version or flexion—viz., the hyperplastic or diseased states of the uterus and adnexa usually found in long-standing cases. I can understand the mechanical principle on which we act when we attempt to support a uterus which has a tendency to prolapse, or which is already prolapsed; but when we apply a pessary, which simply hangs loosely in the vagina after a few hours, in some of the conditions laid down in text books, we are, I contend, proceeding on unscientific lines, for I deny that there is an analogy between the pessary and the splint, save in prolapse, and I fail to see how a Hodge pessary can act as a lever. The subject of the use and abuse of pessaries is a very large one. Their condemnation, so far as their routine use is concerned, has been pronounced by some of the ablest gynæcologists of England and America; but, judging by the number of instruments shown to me by representatives of our surgical instrument makers, they must still be largely employed, for here the general principle comes true of supply being commensurate with demand. Schultze tells us, in his very philosophical and exhaustive work, "that the treatment of displacement of the uterus forms part of the daily routine of the general practitioner." This I believe to be true; but so far as my experience goes, with rare exceptions, and excluding prolapse, we can very largely dispense with the use of pessaries. This conclusion I have arrived at from two classes of practice, comprising women in two distinct classes of society.

First. I have been struck by the number of women who suffer from aggravated forms of version and flexion admitted under my care at the Halifax Union during the last twenty years, and by the almost total absence of symptoms of distress on their part, and though I have a liberal supply of surgical

appliances placed at my disposal, yet my pessary bill has been almost *nil* for this class.

Second. I have found the same condition in women of the better class whom I have had to examine for other causes, so that I have been forced by my own individual experience to the conclusions above alluded to. The old writers—Aran, Becquerel, Scanzoni, Nelaton—held this view, expressed in the following words, quoted by Nelaton from Scanzoni: "Flexions of the uterus have no importance, and are not followed by serious danger, unless *they are complicated by some alteration in the texture of these organs.*" It is necessary to reposit the uterus, owing to well-defined malposition, but my experience is that a pessary will not *per se* keep it *in situ* after it is reposit, and that when the conditions are altered, as by posture, straining, micturition, defæcation, your pessary moves out of place. Rest and position will do what the pessary cannot do. If we look at the drawings in text books, and study them by the laws of mechanics, especially of uterine statics, it should be clear that the means employed are quite inadequate for severe retroflexion or antifixion cases unless you have some descent. Schultze, though he advocates the figure-of-8 pessary, yet is almost as iconoclastic as I am. He says (p. 260): "There is still a very widespread misconception that the uterus can be brought out of an anomalous position by the pessary. This action was specially claimed for the Hodge pessary when it was brought out. No pessary in existence can do this; the normal position must first be restored bimanually; a pessary *may* afterwards maintain it." In prolapse it is different. Here we have a falling body which requires propping up. Examining the mechanism of this state we can understand that if we have a contractile vagina capable of sustaining between its walls any solid substance, rings, wedge, ball, that when the uterus rests on it, and conditions being equable—that is to say, the causes at work in promoting the prolapse being remedied—the heavy body will rest, and being supported, will cease its descent. But here we have to have one condition—vaginal walls sufficiently

strong to retain the support. If they be flaccid or atonic, the support will give, and the uterus will still continue its descent until we have complete *proidentia*. All this is elementary, but even yet not sufficiently appreciated. The means should be proportioned to the end. But even with prolapse this is not the case, for a heavy body like the uterus is but too frequently placed on a simple ring which cannot find support on the damaged columns, and the fancied security the patient has received is all chimerical ; she is living in a fool's paradise, from which is rudely wakened when she finds ring and uterus protruding from her vagina.

Whether general practitioners, as a rule, possess a healthy scepticism as to the value of pessaries, I am not in a position to affirm, though I know from intercourse with many intelligent and experienced practitioners, that my views are not by any means singular. The paper contributed by Dr. Egerton Fitzgerald, and published in your *Transactions*, vol. iii.; p. 37, gives countenance to my belief. Perhaps we may here have an opportunity of hearing some other opinions on the subject. What I consider wanting in our text-books are scientific or mathematical demonstrations on the dynamics of uterine displacements, in which will be shown the forces at work, the axes, the lines of resistance, the lines of replacement (the principle of the fulcrum and the lever are supposed to be connected with the pessary), definite instructions on the use of pessaries, on the best form, and plain reasons for using individual forms in each case, with rules for the guidance of patients. It does not help the student to see in a text-book the figures of a number of pessaries from which to select ; this, I submit, only makes confusion worse confounded. I must here acknowledge that we have one text-book which fulfils many of the conditions laid down. I allude to Dr. Bantock's book on the "Use and Abuse of Pessaries ;" but I venture to offer this criticism, that Dr. Bantock does not make sufficiently clear the dynamics of the pessary. I fully recognise the great aid he gives to the student by exposing in his illustrations and in his drawings the untenable position held by many

teachers as to the action of the pessary. The specimen in my hand I removed a few days ago with great difficulty from a woman, who had worn it for a year. Her condition was most miserable when she came to consult me, and I could give case after case in which I had to remove not only box-wood ovals, but Zwanke's, Hodge's, which had been introduced and left to their fate in the dark cavity of the vagina. I do not forget that Schultze advises that his pessary should remain *in situ* for a year (p. 239)—a practice open to question. When we have placed one of these pessaries in the vagina, our responsibility does not end—this truth cannot be too strongly impressed on young practitioners. What is true of the simple pessary is doubly true of the stem pessary. *Primum non nocere* is a sound surgical principle, not to be forgotten in gynæcology. The stem pessary cannot be used until we have straightened out the uterus—a process difficult when the whole uterus is involved. The stem can only fit as far as the flexion in such cases, and it must either lie partly in the vagina, or if pushed home, pierce the uterus. This point is not sufficiently emphasised.

Looking at the subject by the light of the papers read at this Society, and the opinions of gynæcologists, I believe that in the future we shall derive more benefit from operative measures than we have done, and that in this direction we ought to move, especially as we may hope to have a more rational pathology, by the light thrown on the diseases of the uterine adnexa. Shortening the round ligaments, removing diseased ligaments and tubes, perinæorrhaphy, and suture of the fundus, are philosophic conceptions, and indicate somewhat the lines of progress.

The examination to which we have to subject our patients in order to duly estimate whether antiversion or retroversion, antiflexion or retroflexion, exist, often reveals to us conditions which would not otherwise be discoverable, and we are able to diagnose the existence of some of the various forms of tumour which are so plentifully brought before the notice of this Society by our operating gynæcologists. In addition, we

learn that behind the displacements there are other changes, as ovarian congestion, chronic metritis, hyperplastic states, cervicitis, adhesions, inflamed ovaries, the rectification of which is certainly as important as the change of position, and to some of which we can render effectual assistance by measures appropriate, but simple.

I have alluded to my experience at the Union Infirmary, and you will pardon me if I harp again upon an old string. In various papers, and notably in one published in a little book called "Hospital Management" (Keegan, Paul & Co.), I have pointed out the value of the clinical material we meet with in our union infirmaries, and I have formulated a scheme which, if adopted, would materially improve the status of these institutions. For teaching purposes our wards are admirably adapted, for students would see there the common diseases of every-day life, as well as rare and interesting cases. What is very much wanted is a closer relationship between the union infirmary and the general hospital; then the medical *personnel* would be brought up in point of number, and greater results would follow. I have 125 female beds in usual occupation; these include eight for confinements and eight for venereal cases. The geographical distribution of disease is a matter of interest, as well as the incidence of disease amongst certain classes. Contributions to this common fund of knowledge might usefully come from medical officers of union infirmaries. Take, for instance, cancer, which is now so much, as the French say, "in the air." Such cases gravitate to the union infirmary. During the last twenty years I have only had six cases of uterine cancer, and four of cancer of the breast, in this infirmary. I have had a number of cases sent in with cervical ulceration, villous growths, syphilitic ulcers of cervix, which were supposed to be cancerous, but the recovery of the patients gave the negative to this. Again, how far are fibroids, ovarian tumours, prevalent amongst the working class in our northern manufacturing towns? I can give a partial answer for one town. It is remarkable that during twenty years I have not had a single case admitted,

though I have been on the look-out for them. What influence has gonorrhœa on the production of tubal diseases? This is another question of the gravest importance. Medical officers of union infirmaries might be able to tell us something on this point; but, unfortunately, they can only partially help us, as they are not allowed to make *post-mortem* examinations.

The commonest affections in my infirmary have been menorrhagia, metrorrhagia, chronic endometritis, what is known as pelvic cellulitis (a name which embraces all the diseases of the uterine adnexa), various common affections of the vagina and vulvæ, which I need not enumerate. I have had only two cases of vesico-vaginal fistula; ruptured perineum I have rarely met with. In private practice I have been, I must consider, exceedingly fortunate in having not an almost absolute escape from this condition, but very few cases. One case I had many years ago. I was delivering Mrs. H. with the long forceps. She was lying on an old-fashioned trestle-bed, and suddenly the bed gave way, and there was an indescribable scene. The woman fortunately escaped with a completely ruptured perineum, and I was taught a lesson on again applying the forceps to first make sure of the stability of the bed. She made an excellent recovery, the perineum being brought together by the old-fashioned quilled suture, and I attended the woman twice afterwards. Immediate suture, as Dr. Bantock affirms, secures excellent results, even though we have the lochia saturating the wound. Speaking of laceration, I may here allude to the subject of cervical laceration, upon which an admirable paper was read by one of your secretaries, Dr. R. T. Smith, and published in vol. i., p. 294, of your *Transactions*. I have attended 3,435 consecutive labours, attending the same women three, four, five, and even eleven times; so that I have had a fair opportunity of noticing the condition of the cervix. I have clearly made out its shape, and I can only say that it has been as varied as the patients' noses. I have met with the puffed and fringed cervix, the stellate cervix, the patulous

and elongated cervix; but I have not found any tears of the severe nature I find described in American gynæcological works, requiring what is now best known as Emmett's operation. The slight lacerations heal, and I believe, as a rule, the cervix bears the strain imposed upon it just as well as the body of the uterus. I have been able to examine a number of uteri with complete *procidentia*, and I have been struck by the symmetrical shape of the os. I have now a patient under my care who has had five children. Through *mauvaise honte* she deferred seeking advice until she found the uterus protruding. In her case there is a circular, perfect os, though surrounding it there is a ring of denuded epithelium. She tried a ring, on her own initiative, but it was expelled each time she coughed. She now wears with great relief one of Dr. Barnes' cup and stem pessaries.

We are frequently consulted on the subject of sterility. Unfortunately, as a rule, our advice is only sought after some years of married life have passed, and I believe that this is the cause of our being able to do so little for the relief of sterile women. Bad habits have been indulged in for years; a desire for children leads to excess; mischief is done in the early days of married life which cannot be undone. I have notes of thirty-eight women, who through sterility have sought the best advice, but they have remained sterile. They all sought advice after years of married life.

The unsatisfactory state of the treatment of sterility I consider very much arises from what I have alluded to—viz., the deferring of advice to too late a period. "Hope springs eternal in the human breast," and women keep on hoping for conception, though they are suffering from disorders of menstruation, vaginal discharges, and much graver impediments to conception. But sterility is only a symptom. There is no universal formula or panacea which we can apply to each case. Slitting up the os or dilatation may in individual cases do good, but its general application is illogical. Each case has to be treated on its merits. Of course, if we use the metrotome for every case of sterility,

we shall be certain to have some successes. We must not forget, too, that the husband frequently requires as much treatment as the wife.

We have entered on a new phase, however, and it is not now-a-days so much a question how to make sterile women fertile, as to make fertile women sterile. The fashionable vice of to-day is the prevention of conception through dread of the pains of labour, dislike to children, &c. This is not the place to discuss the subject, save in its relation to disease—does the system injure the woman? I do not wish to generalise from solitary facts, but undoubtedly, in a number of cases in my own practice the system has been attended by symptoms of uterine disturbance—that is to say, in cases where the semen has not been received within the natural *vas*, where Condom and retraction are the methods employed.

(1) In five cases there has been well-marked uterine irritability, with general *malaise* and cardiac disturbance.

(2) Uterine congestion, with vaginitis, prevailed in three cases, whilst in two I found ovarian tenderness. One case I give in detail: An old patient of mine, who had had four children, during an absence from home consulted a physician in the metropolis. She had mitral disease, but mitral disease can hardly be considered an impediment to having children. She recovered from her confinements very well. This physician told her that if she had another child she would die, and instructed her how to prevent conception, suggesting the worst of the methods—retraction. Life is valuable. The lady, who was of strong religious feeling, felt she was committing sin, but the husband consenting, they carried out instructions. For five years the practice was indulged in. There was such an aggravation of her condition that I was continually in attendance. After five years, through inattention to the instructions, she became pregnant. There were tears and alarm, and then I heard the history. Abortion was suggested by them as the only alternative to save her life. I at once put my foot down on the idea, and said that there was no necessity, as she ought to go on full time. My patient had

faith in the physician who advised retraction, and murmured. So I said, "We shall see an obstetrician of repute in town, and you can then have an independent opinion." I saw Dr. William Playfair with her. He heard the story and said, "Go on till full time." She did so. I delivered her early, with the long forceps, of a fine girl, and she had not a bad symptom. The mitral disease still exists, but she has been since a happy, bright, contented mother, with a minimum of illness. I mentioned abortion as a suggestion. It is an easy gradation from preventive checks to abortion production, and few will question the ill effects of abortion on the uterine organs. I very much fear that we may now apply the satire levelled by Juvenal against the women of his time :—

"Sed jacet aurato vix ulla puerpera lecto,
Tantum artes hujus, tantum medicamina possunt,
Quæ steriles facit, atque homines in ventre necandos conducit."
Juvenal, Lib. ii., Sat. 6.

Ovid was sufficiently educated to recognise the danger of criminal abortion from two aspects—the moral side and the health side—as the following lines prove :

"Quæ prima instituit teneros convellere fœtus,
Malitiâ fuerat digna perire suâ.
Hoc neque in Armeniis tigres fecere latebris,
Perdere nec fœtus ausa leona suos.
At teneræ faciunt, sed non impunè puellæ
Sæpè, suos utero quæ necat, ipsa perit." *Ovid, 14 Eleg. Lib. ii.*

Ovid has left us an excellent motto : "*Principiis obstas, sero medicina paratur.*" If we would remedy this evil of modern life, it must be by the application of this motto. If we can prevent this practice, I consider it is our duty to do so, and join in the condemnation against it pronounced even by pagan poets.

This perversion of natural instinct may be the outcome of civilisation, but it is only one of the many forms of perversion we meet with. The neurotic who wants a speculum passing daily may be familiar to many of you. She would require a paper to herself to fully describe her, for the sexual

psychopathies are only symptoms of varied pathological conditions.

Preventive medicine is assuming a very great importance, as regards the other specialties, the eye, orthopædics, and, perhaps, in time, it may be possible for the general practitioner to apply his knowledge to the prevention of uterine diseases. This, of course, will require some education on the part of the public before they will bring to us their daughters. As a rule menstruation is disregarded, and until some grave symptoms come on, as chlorosis, or excessive menstruation, we are rarely consulted. After marriage, when pregnancy takes place, all is left to chance, and the hygiene of the pregnant state is too little attended to. A very excellent chapter might be written on this subject.

I would recall to your mind the words uttered by our first president, the lamented Meadows, who died all too early, before the bantling he had helped in forming had commenced to walk. "I am," he said, "a firm believer in the use of drugs. To me practice would be shorn of its greatest attraction if I did not feel confidence in the things I prescribe." He asked for some experiences from general practitioners on the subject of the use of drugs—what they used, and why they used certain medicines. We have not had much information on the therapeutical side, so that a few words may bring out other observers to confirm or disprove my experience.

In the foremost place in uterine therapeutics I would place the use of water, hot or cold, plentifully administered by means of a proper *douche*, such as the one now in fashion. The proper introduction of the tube is most important, and it should be inserted to a good length, so that the water may be thrown on the os and surrounding parts. The ordinary enema cannot do this so well, owing to apposition of the vaginal walls and the intermittance and weakness of the jets.

The hydrostatic douche in modern use is not by any means a new invention. It was employed for the same purposes we now employ it, and even so far back as

1814 Alibert advises the practitioner to use, in addition to water, "various antiseptic substances, as wine and quinine," by means of this apparatus.

Apart altogether from purposes of cleanliness, we cannot too strongly impress on women the great importance of washing the vagina. We can employ hot and cold water as a uterine sedative, for the relief of various inflammatory affections of the uterus proper, the vagina and vulva. There are a large number of minor ailments, which cause considerable amount of pain and trouble, and which are absolutely dissipated by means of free douching. Exudation or hyperplastic states appear literally to melt down under the continued use of the hot douche. The cold douche is particularly serviceable in relaxed states, in women who have large flabby uteri and constant discharges, resulting from atony. The douche will not dispel a fibroid tumour, cure prolapse, cancer, &c., but it will, in one or other form, be found beneficial and grateful to the patient by removing or washing away acrid discharges. The general term "*leucorrhœa*" is not only a very imperfect, but a harmful expression, leading too frequently to neglect of examination of the local conditions which underlie it, and which cause the discharges embraced under this name. Women have acquired a familiarity with the term "*whites*"; believing it to be a very simple symptom, they neglect seeking advice. The subject of intra-uterine injections is a very important one, and we shall frequently have to decide as to their advisability. In certain states of the endometrium we can do no good unless we clean out the uterine cavity, and previous to this we should first dilate, and as we have now so many excellent dilators at our service this operation, with ordinary care, may be performed without risk. It is in the highest degree unwise to inject an undilated uterus. The cervical portion of the uterus is frequently involved, and we have as a consequence a very common complaint, chronic uterine catarrh. Here the remedy I have most faith in is the tincture of iodine—an old remedy, dating back to 1830—combined with free washing and astringent applications, sub-

sequently applied by means of the uterine douche. When stronger applications are necessary I resort to the tinct. ferri muriatis, first dilating the os, and then carefully injecting with a small syringe. Then I pack the parts with fine cotton-wool, allowing rest. The use of the nitrate of silver I have no experience of, as I have found the above satisfactory. Many other inflammatory states of the os are met with, which we have to contest by rest, sedatives, local applications—as leeches and scarification.

I regret to say we have very few uterine specifics, though we have a number of medicines which are indispensable to us to relieve symptoms. We have ergot, quinine and strychnine, acting in various ways on the uterus. Apart from obstetrics, ergot finds a wide use in hæmorrhage depending purely on want of contractility, in cases of subinvolution. I have never found it to act as an emmenagogue; quinine and strychnine have the same power, though in a less degree. I know of no specific emmenagogue, not even permanganate of potash. Aloes will bring on the menses, but so in many cases will any purgative, when by relief of constipation, by this process of blood-letting, we have relieved the pelvic vessels; but this action has no relation to specificity. Women, through bad habits and feminine modesty, are very liable to constipation, and this is the case very largely with our operatives, so that purging is a very necessary commencement of all treatment. An overloaded rectum, and the straining induced thereby, are very largely responsible for minor uterine troubles. In the first rank I would place the ordinary sulphate of magnesia, prescribed in some form, by ourselves. I do not tell my patients to purchase Freidrichshall, Hunyadi Janos, or Æsculap. In the next place I would place cascara sagrada, as it has the valuable property of not constipating. Next in value are glycerine suppositories, when the bowels have been first well freed.

Without sedatives we could not well get on. We have morphia; then next to it in value conium, in the shape of the succus. It acts like magic in backache, and I place great reliance on it.

The bromides are essential in the irritability produced by disturbed uterine function. The older remedies, as castor, musk, valerian and camphor, have no value. We have a wide choice in caustics; and for astringent remedies we can depend on oak, elm, bark, alum, sulphate of zinc, &c. Deodorants—misnamed disinfectants—are frequently necessary, and we have a plentiful choice.

I have tried a number of new remedies, as gossypium, used by negroes in South America, a so-called emmenagogue, but I cannot speak favourably of its action. Amongst the local agents the only one I have found of any value is the *Hamamelis*, or witch hazel. It is an agreeable and soothing astringent. *Viburnum*, *hydrastis*, and many other new remedies have been tried by me, but they have disappointed me. Vaginal tampons, or pads, are admirable contrivances, and may be relied upon in tender states of the cervix, for the application of dressings, &c. Of course we have to prescribe other remedies, such as tonics and the mineral acids, but the indications for their use are simply derived from general considerations, and bear no relation to special gynæcological practice. Amongst the new remedies received, I must not forget to mention the bougies introduced by Messrs. Christie and Co. for application to the interior of the uterus, a sample of which I show. The construction is simple, and as the substance can be altered at will, I believe this will prove a useful little instrument.

The general sketch I have given is sufficient to show how the general practitioner stands in relation to gynæcological specialism, and what a wide field he has, even without touching upon ovarian tumours, and the various diseases of the uterus and its appendages, which call for absolute operative interference, for a class of cases which medicine cannot benefit, and for which the knife is the only remedy. It is essential that he should be able to diagnose these conditions.

During the last few years we have had to learn a new terminology—I allude to practitioners who have been in practice for some time—and I think it speaks well for the

general state of knowledge of the general practitioner, that in his work on ectopic pregnancy and pelvic hæmatocele, Mr. Lawson Tait is able to place on record so many cases which had been diagnosed before operation by the general practitioners in attendance. What is wanted by the general practitioner is guidance and instruction on the diagnosis of obscure conditions. He is willing to learn, to keep pace with the times; and it is all important that he should familiarise himself with the symptoms of myoma, salpingitis, ectopic pregnancy and the rest, because in many cases time is of the greatest moment, and an early diagnosis means a difference between life and death. Early operation is, or should be, a gynæcological maxim. From the many admirable text-books we possess on the diseases of women, he will learn a great deal, but I venture to think he will learn a great deal more by reading the admirable *Transactions* published by this Society, or by attending its meetings, for thus he will be kept up to the latest advances, not only in surgery, but in gynæcological pathology, diagnosis and treatment.

Treating the subject from the general practitioner's side, I cannot conclude without a few words on our relation to the specialist. There cannot be any antagonism between us, even though I hold the view that as general practitioners, we ought to be able to cope with the ordinary run of practice, because specialists themselves have been so liberal, instructing us by means of papers and text-books, opening our eyes, and making their special knowledge the common heritage of medicine. But our work must stop and have its limits; we must in cases of doubt, in cases abstruse, in cases requiring special operative measures, invite the aid of the specialist, aid which is always readily given, and aid which we should all the more readily invoke because you are not our competitors, as you have given us the wider field. It has been my pleasure and privilege for some years to have had many patients under various specialists, and I can say without flattery, that these consultations have been advantageous both to the patients and myself, and that I have found a high code of honour prevailing.

My experience is not singular. There is an antagonism of course between the general practitioner and specialists of a certain class. The specialist who finds fault with treatment when there is no ground for it, the specialist who makes an alteration in a mixture which simply consists in changing the colour, and who resorts to other artifices of the same kind, is naturally not popular. We know these men and their reputations, and we avoid them, but they are the exceptions. The specialist who carries on his practice on the pure lines of honour and candour, who is honest to his patient and to ourselves, is fully appreciated, and we have no antagonism to him. I have perfect confidence in those specialists to whom I send my patients, and I can always make a large selection. If the specialist deem it necessary that the patient should remain under his care for a certain time, I consider that he is perfectly entitled to retain the patient, otherwise his hands would be tied, and he would simply be the slave of the practitioner—the patient would not receive what is her right—viz., the fullest benefit from the specialist's skill. As regards those patients who consult specialists without telling their family medical attendants of their intentions, the specialists are not bound by any code to inform the practitioner or to hand back the case, though many specialists do go beyond the rule—writing to the previous medical attendant their views of the case. The general practitioner does not himself object to take patients who have been previously attended by another medical man. He will not, it is true, take a patient when another medical man is in attendance, or when he is summoned in case of emergency: but when the patient desires to change, the code allows the practitioner full freedom to treat the patient who voluntarily comes, and who is not under the care at the time of any other practitioner. The golden rule of life is to do unto others as you would them to do unto you, and it would be paradoxical for the general practitioner to expect more from the specialist than he himself practises. We are apt to forget, in our zeal for medical etiquette, the rights of patients. The patient has

a right to choose his medical adviser, general practitioner, or specialist. Our duty is, to act honestly.

If in general practice we are consulted about a case, and we cannot diagnose it accurately, it is criminal to carry the patient on for weeks or months without seeking other advice. If in special practice we magnify trifles and make mountains out of molehills, for the sake of extracting additional guineas, such conduct is equally criminal, and it is such conduct on the part of a few which brings some discredit upon specialism. A patient of mine, without my consent, consulted a specialist. This specialist was of the vulture and speculum tribe, and he extracted seventy guineas from her, and would have had more, but chance enabled me to hear of his exploitation. A week's treatment under my care restored the patient. Fortunately, this class of specialist is rare. The diagnosis of the general practitioner is not always correct, but neither is the diagnosis of the specialist; so that charity, which covers a multitude of sins, may here find an application. And I believe it does, for the more highly educated a man is, the more disposed is he, in place of finding imperfections, to find excuses. There are many other points which I might have more fully considered, but these perhaps may be brought out in any discussion which may take place on my views. General practitioner and specialist have a unity of purpose, each working in their own sphere, but each working to a common end—the elevation of gynæcological practice and the relief of suffering women.

The PRESIDENT said that the Fellows would all be very much obliged to the author for his very excellent paper on so wide and general a subject. He regretted, however, that time would not allow of their discussing it as it deserved that evening.

Dr. BANTOCK said he thought it would be a great pity if so admirable and suggestive a paper should not receive proper recognition and discussion. It brought forward many questions of great importance, and he moved that the discussion be adjourned until their next meeting.

Dr. CASE said that as a general practitioner he would second the resolution.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, JUNE 12, 1889.

ARTHUR V. MACAN, M.D., PRESIDENT, IN THE CHAIR.

PRESENT : 25 Fellows, 4 Visitors.

The following was elected a Fellow of the Society :—Dr. J. H. Kellogg. The following were proposed for election :—W. S. Bagot, M.B., B.Ch.Dub., Dublin ; Dr. Sackheim, M.D. Strasbourg, London ; P. L. Mootovsawmy, M.C., F.L.S., Madras.

Dr. BANTOCK showed a specimen which he said was somewhat peculiar. It was a soft fibroid which had developed in the anterior lip of the uterus between it and the bladder. On exposing the tumour it was seen to be loosely covered with peritoneum, and he at once proceeded to shell it out. That was easily done until he got quite to the base, and there he had some difficulty in separating it from the bladder. Before proceeding further he applied an elastic ligature around the base of the tumour. When he had completed the separation he found he had opened into a cavity which was lined with mucous membrane. He was rather puzzled at first to know what this cavity was, but he got his assistant to put his finger into the vagina, and then he discovered that they communicated. Before beginning the operation he had introduced a silver catheter into the bladder, and found that it went below the loop of the elastic ligature, showing that it was very intimately connected with the base of the tumour. When he had separated it he came upon the body of the uterus, which was connected with the lower and back part of the mass. The great difficulty was to avoid the bladder, and it was only by putting in the catheter and putting the pins almost through the raw surface and pulling it back that he managed to

escape injuring that organ. The operation was done three or four weeks ago, and the patient was doing well. At the end of a fortnight there was still an opening into the vagina, so that when it was syringed out the liquid escaped along the pedicle, but it had since contracted to a hole the size of a crow quill. The operation was, he said, one of considerable difficulty, and he had thought it worth while calling attention to it on that account.

The PRESIDENT asked what were the symptoms.

Dr. BANTOCK said that menstruation was not painful and there had not been any menorrhagia, but there was so much discomfort that the patient was very anxious to be relieved of her burden.

The PRESIDENT said he could not see any reason why the bladder should not have been dissected right off the surface of the tumour and allowed to drop backwards. There would then have been no trouble about the operation at all.

Dr. BANTOCK then showed a second specimen, consisting of a uterus with multiple fibroids, one tumour growing from the fundus of the uterus and another from the anterior wall, just as in the preceding case, between the bladder and the uterus. He said that this case showed the value of the elastic ligature, for it would have been utterly impossible to control the bleeding without some such contrivance. He said that the value of the elastic ligature lay in that it contracts upon the tissues as they shrink, and so maintains the pressure. He did not have the same difficulty in separating the tumour from the bladder as in the other case. The case also showed that it was sometimes necessary to prepare one's own pedicle. He had made his incision nearly three inches from where he expected to be able to apply his *serre-nœud*, and the specimen gave no idea of the amount of tissue left behind. The question arose, indeed, whether he would be able to bring the stump up so as to transfix it with pins and keep it outside. He was at first afraid that he would be obliged to have recourse to the plan which Dr. Kelly had brought forward in the *American Journal of Obstetrics*—a method which he re-

commended for general use. He said that although he had long anticipated the necessity for some such method as had been suggested by Dr. Kelly, yet he said he would rather trust to the *serre-nœud* than to a method of that kind, by which it was impossible to restrict or diminish the amount of raw surface as with the *serre-nœud*. In this case, having managed to obtain a good purchase, he was enabled to apply the *serre-nœud* above the elastic ligature. It was not quite a month since the operation, and the hole left by the stump would not hold more than ten drops of fluid at present. The symptoms were much the same as in the other case—no pain, no dysmenorrhœa, but extreme discomfort. The patient was thirty-four years of age, a nurse, and she found it utterly impossible to carry children about with this large tumour in the abdomen. He said it was a very rare thing now-a-days to meet with hæmorrhage in these cases of such severity as to call for hysterectomy. What was complained of was extreme discomfort, not even amounting to pain.

Dr. EDIS said that these cases belonged to a class which was ill understood by the profession. He pointed to a specimen on the table which had been removed by him from a patient fifty years of age. She had been suffering from profuse attacks of hæmorrhage, and had consulted several medical men, who told her she ought to wait for the "change of life." He agreed with what Dr. Bantock had said as to the principal symptoms being bearing down and discomfort or distress. He thought that this was a point which ought to be well understood, and the absence of other symptoms, such as hæmorrhage, was a detail which, from a diagnostic point of view, was well worth remembering. He recalled a case in which there had been amenorrhœa, and in which for nine months the patient had been under the suspicion of pregnancy. These points should be impressed upon the minds of practitioners at large. A patient might have a fibroid which was killing her by the distress and functional trouble to which it gave rise, but it was not once in a number of times in cases of multiple fibroids that they had hæmorrhage of a severe

character. Moreover, in such cases, hæmorrhage might be continued for several years beyond the natural menopause.

Mr. LAWSON TAIT said that the views just expressed had been put forward at the Society again and again, but it seemed like a voice crying in the wilderness. He alluded to a paper which had appeared in the last number of the *British Medical Journal* from a gentleman whom they all respected or had respected, in which the views expressed as to the pathology of these cases was that of forty years ago. He said that what Dr. Keith had stated about myomata was perhaps quite true thirty years ago, but was not so now. Pathology underwent changes, and had done so in this instance. He pointed out that in Africa, where the negro race flourished in all its vigour, the conditions were not the same as here, and fibroids were almost unknown, while among the negro race of North America fibroids were extremely frequent. He said that the pathology of this affection had changed just as that of zymotic diseases had changed. He asserted that it was a much more common affection now, and much more serious than when he used to assist Sir James Simpson. He rarely saw women then suffering from myomata. He said that these cases impressed themselves upon the mind, and would not be likely to be forgotten. He had not the slightest doubt that in a large proportion of the cases the disease was much more active and serious than it was thirty years ago. He said that Dr. Keith talked in a way which seemed to indicate an opinion that Dr. Bantock ought to be in the dock. He asked whether he was talking seriously, or whether it would be necessary to treat him seriously. He said that this kind of thing could not be allowed to go on. It brought them back to the time of Mr. Baker Browne, and the persecution of which he was the victim. Dr. Keith said that he could cure these cases by electrolysis. A discussion had been opened for eighteen months past on the subject, yet none had so far shown a case cured by electrolysis. He said that by chance he had that day seen the lady alluded to by himself as being the only case in which electrolysis appeared to have done good. She

had been three months in Paris, and had had thirty-five applications, of which thirty-one were done under an anæsthetic, and had paid £300. Yet to-day she was in a worse plight than before, and was more anxious than ever to be relieved.

Dr. ROUTH said he had been very much amused by the discussions which had taken place from time to time at the Society on this subject. These proved they were a very progressive Society. He remembered the views brought forward by Mr. Tait on former occasions, and between those views, and the views expressed by him that evening, there was evidently great progress. He recalled the time when it was stated that the only way of curing these tumours was by cutting away the appendages. Then some failures were noted, and in explanation it was stated that the tubes had not been cut off close enough to the uterus. But it was maintained that if they were cut off close enough there would be no hæmorrhage. At a later period they were told that they had been mistaken, that there were at least two varieties of fibroids, hard and soft, and that one sort was benefited by this treatment and one was not. Now they were told that if a tumour caused even discomfort they ought to remove it, and that again was a new view. He had always understood that if a woman complained merely of discomfort, but not pain, it was preferable not to operate, yet that evening he had heard it stated that discomfort constituted a ground for removal. Dr. Edis even went a step further, and said that even if these tumours were accompanied by amenorrhœa, they ought to be removed. This looked as if chaos had come back again. With reference to the effects of electrolysis, if persons had a strong prejudice against the method, but did not use it, surely then their arguments were not conclusive. If Mr. Tait, for instance, would come forward and say, "Here are a number of cases in which we have tried electrolysis, and have derived no advantage," he (Dr. Routh) would yield at once, because there would be practical experience in support of his views that it was not

successful. If, on the other hand, persons who had used the current claimed to have succeeded in causing the tumour to disappear or markedly diminish in size, then he was inclined to believe that the operation, instead of being bad, was in itself a good one. But clearly at the present moment they were in a state of chaos as to the class of cases which would probably be benefited by this remedy or that. He would admit that there were cases which would require to be operated upon by abdominal section, but he declined to admit that *all* of them called for surgical measures. It almost seemed as if there were an epidemic of fibroids just now, and he recalled that he had raised this very question as to its cause. Fibroids were only one of a large number of diseases connected with the reproductive organs which had undergone an increase. He looked upon fibroids as a sort of artificial gestation, due to excessive sexual stimulation. He thought that the increase was largely due to the character of the literature of the day, which was always calling the attention of women to their internal organs. Novels, newspapers, &c., all teemed with details which were calculated to bring about this undesirable result. He mentioned that the other day when in the country, he had picked up a number of the *Weekly Dispatch* and was horrified to find it filled with the most prurient details. With regard to the greater frequency of fibroids among the blacks in America, he said that if there was one fact more obvious than another, it was that sexual indulgence was more prevalent among them than perhaps in any other part of the world. They were vastly more depraved than the simple aboriginals of Africa, whose morals on the whole were perhaps better than our own. Certainly there was room for great improvement in this respect, and for a scientific philosophical discussion of the whole question, as a causative of sexual diseases.

Dr. BARNES, with reference to the presumed or assumed frequency of these diseases, suggested that they might not in reality be more frequent, but were more frequently observed. A description of a disease was sure to be followed by

the discovery of cases. Women had their attention called to it now, and went to a competent man—a thing hardly thought of forty years ago. Uterine tumours were comparatively unknown in the living subject, for the simple reason that the use of the speculum and the sound was denied, and even a vaginal examination was considered inadmissible. He suggested that from year to year observers in other departments of science were making new discoveries. New stars and planets were discovered, thanks to improved methods of observation and new appliances, although they must have existed long before we were born.

Mr. TAIT said that Dr. Barnes did not quite meet the case. He said that old literature was as telling as anything. If they took an old author such as Astruc—by far the best clinician who had ever written on gynaecology—he accurately described fibroids, but did not describe an extra-uterine pregnancy. As regards most other gynaecological affections, he described them as well as he could do at present. It was impossible that an observer of his experience should never have seen an ovarian tumour if they were as common then as now. He admitted that the chaos was considerable, but he thought that Dr. Routh's remarks would only intensify it. He said they had got as far as this, that young women suffering from myoma can be cured by removal of the appendages, but there were certain tumours, the minority, that did not yield to this treatment. They got women at the climacteric period with suppressed menstruation, in whom extreme flooding came on to a degree which might menace their days. He asked what they were to do with them? They were not affected in the least by electrolysis. The lady he had alluded to had been a long time under the first electrician in Paris, and was not benefited by his treatment a bit—in fact she had been made much worse.

The PRESIDENT said that the question really seemed to be, What are the indications for operation in cases of fibroid? It was a complicated question, and one not very easy to settle. The great thing was to be as guarded as possible.

He thought therefore that the possibility of enucleating these tumours ought to be more borne in mind. One's judgment, of course, depended largely upon what one's success had been in the past. He himself had tried the intra-peritoneal method, and he had lost nearly all his patients, but the extra-peritoneal method was much simpler. He said that if they could remove a tumour from the uterus and sew up the cavity from which the tumour was taken, and then return it all to the abdomen the wound would not be greater than in an ordinary cæsarian section. He thought that this would be a great improvement. He thought that the tumour between the uterus and the bladder might have been enucleated and the uterus saved, and also without removal of the appendages.

Dr. BANTOCK, in reply to the remarks of the President, said he was glad to have the specimen to show them, because a specimen was much more convincing than any description could be. He said that if anyone would look at that uterus (the specimen being the uterus after removal of the tumour) he would at once see that it would be vain to imagine that a uterus damaged to this extent could be of any further use, to say nothing of the danger of attempting to close a wound like that and returning it into the peritoneal cavity. He had therefore no hesitation in saying that the idea of treating that case in any other way than the manner he had adopted, by removing the uterus, would have been courting a fatal result. He pointed out that the uterine cavity was completely destroyed. There could be no hesitation as to the proper method of treating these cases in the future. He had treated a tumour in the way suggested, but then it was only a small one, leaving a small wound. In one or two cases of that kind he had been obliged to fetch it out of the cavity before he had finished the operation on account of the pedicle oozing freely, and if he had left it inside it would have been another case to add to his unsuccessful ones. He wished to correct a little misrepresentation in the sense that he was said to have operated almost with-

out justification. It must be evident that when a woman has an occupation like that of a nurse, who is thirty-four years of age, and who says that she is no longer able to discharge the duties of her position, and that in consequence it is absolutely necessary for her to get rid of her burden, then it was perfectly justifiable to operate upon her, provided that she was made to recognise the risk of the operation. He never did this operation without throwing upon the patient the whole responsibility of deciding upon its propriety. He said to the patient, "If you tell me that the discomfort you experience is such that you are prepared to undergo a very great risk for your life, then I am perfectly willing to do what I can to relieve you." The case was entirely different from that of an ovarian tumour.

Dr. EDIS showed the specimen removed from a case of multiple fibroma. The patient was a woman aged fifty, and the operation was undertaken simply and solely on account of the hæmorrhage. This came on suddenly, "as if a tap had been turned on," and not only was her life jeopardised, but, being a lady in reduced circumstances, she was unable to supplement a very small income by continuing to give lessons. He told her that it was for her to decide; that he knew what she had, but not what she suffered. She fully agreed to the operation, because when the hæmorrhage was absent there was pain. He said that looking into the specimen one could see that some of the growths were pressing on to the walls of the uterus; but clearly in a case like that to have dilated the uterus and endeavoured to relieve her that way, would have had for effect to set up a low form of inflammation which would have done the patient no good and the practitioner a great deal of harm. With increasing experience he said he had come to the conclusion never to enucleate these tumours. In former years when his hands were tied he might have done so, but for his own part now that he had thrown off the shackles and had got clear of a place where his hands were tied all his life he would no longer attempt to enucleate. He thought it was a most

dangerous proceeding. Now that he was free to act according to his judgment, whenever the tumour was of any size, he would not think of it. Talking about making confusion worse confounded, he said that if Dr. Routh had more distinct ideas than they had on the subject he should bring them forward, but otherwise let them all wrestle with the question and, as Mr. Tait said, follow in the steps of pathology. It was no good passing a glib sneer at this or that; the elucidation of the question would not be assisted thereby. He said he must reiterate his opinion that they must deal with the individual patient. One patient would bear without apparent harm a loss of blood which would bring another almost to death's door, and it was the same with regard to the amount of pain. If the patient did not feel the effects of the hæmorrhage, and did not complain of the pain, then the operation was unnecessary. He said that it was not likely that they would be in a position for some time to come to say that this class of tumour requires to be operated upon, and certain others would be amenable to electrolysis. In reference to electrolysis, he said that he had afforded every facility for the method to be tried in his wards, but he was unable to say that any benefit had been derived from it. The beds were occupied for three months at a time, and several patients were admitted, operated upon, and discharged, while these other cases were waiting. He thought that electrolysis was merely a fashionable craze, just as any alternative to the knife would be sure to be popular.

Dr. HEYWOOD SMITH said he supposed it was a slip on Dr. Edis's part to say that he would remove a tumour even if it was presenting at the cervix.

Dr. EDIS said he should, if much laceration of tissue would be required in order to get the tumour out, even if at the cervix, as pyæmia would very likely follow.

The PRESIDENT said he agreed with Dr. Heywood Smith. He thought enucleation should not be absolutely condemned. He observed that to open the abdomen to take out a tumour which was presenting at the cervix would be a roundabout

way of getting at it. It would certainly be the longest way round, but whether it would be the shortest way home he would not like to say. He said he had himself removed tumours with the spoon. The great thing was to gouge it all away. It was quite a minor point whether it was removed in pieces.

Mr. TAIT said it was very easy to enucleate a tumour of that kind if it was a simple myoma, but not if it were multiple. If one such tumour were removed by enucleation the patient would be in no better condition.

Dr. R. T. SMITH said he had removed a large fibroid a fortnight ago. In that case electrolysis had been tried during a period of three months without the slightest benefit. He said he was quite willing to give new methods a trial, but his experience of electrolysis was that it did not yield good results.

Case of Porro's Operation.

Dr. FANCOURT BARNES observed that all the specimens shown to-night were cases of hysterectomy, and all had recovered. That fact was a very good answer to Dr. Keith's letter in the *British Medical Journal*. The case I have to bring before the Society is that of a patient, aged thirty-two, who had not menstruated since the 5th December, 1888, previously to which date the catamenia had been regular. She was sent into the hospital by my colleague, Dr. Hugh Fenton. She had noticed a hard lump in her right side two months ago. She had experienced morning sickness, and had felt foetal movements some weeks before admission into the hospital. On examination the breasts were found to be enlarged and to contain milk. Since the 29th of April there has been continual pain in the lump in the side of a dull aching character. On May 13th she was placed under ether for examination and consultation. By the vagina two distinct tumours could be felt, one of which appeared to be an extra-uterine cyst both to myself and those of my colleagues who

examined her. The tumour in the right side could be plainly felt through the abdominal wall, and appeared to be fixed. The sound could only be passed in two-and-a-half inches. An exploratory incision was advised.

On May 16th the patient was placed under ether, and an abdominal incision of about four inches was made. On passing the hand into the abdomen I felt a hard tumour on the right side attached to the uterus. The omentum and intestines were firmly adherent to the tumour. The adhesions having been separated the tumour was drawn out of the abdomen, when I found it was growing from what seemed to be the uterine sac, but which turned out to be the pregnant uterus itself. The pedicle, which was almost sessile, was transfixed and the tumour removed. Dr. Edis, who was present at the operation, was then of opinion that it would be safer to remove the uterus and ovaries after the amount of injury and manipulation which had been necessitated by the removal of the tumour. This view coinciding with my own and Dr. Fenton's, I applied Dr. Fenton's new *serre-nœud* round the cervix and broad ligaments beneath the ovaries. I then made an incision through the uterine wall, and delivered the foetus, which was lying in the ordinary position with the head presenting at the cervical zone. The *serre-nœud* was then tightened, and the uterus with its annexes amputated. The abdomen was closed with silver wire sutures, the uterine pedicle remaining outside at the lower angle of the abdominal wound. During the first twelve hours after the operation there was some oozing from the stump on two occasions. This was immediately controlled by a turn of the *serre-nœud*. The patient complained of some pain in both sides of a dull aching kind. From the day of the operation onwards the temperature remained normal, except on the eighth day it rose to 101° Fahr., and fell to normal on the following day.

On May 27th the pins and *serre-nœud* were removed, together with a portion of the pedicle. Since then the wound has been rapidly healing. On cutting across the tumour after removal it was found to be a myoma in process of

breaking down. This condition, together with the adherent omentum and intestines, would undoubtedly have resulted in some grave complication if operative interference had not been resorted to. The diagnosis was rendered obscure by the position of the myoma, attached as it was by a sessile pedicle to the right side of the uterus. All the relations of the parts were thus disguised, and the impression given that the pregnancy was extra- and not intra-uterine. I saw the patient two months after she left the hospital. She was in perfect health and informed me that she was to be married in a few months, the conditions being known both to herself and intended.

Dr. HEYWOOD SMITH asked what was the exact size of the pedicle which Dr. Barnes had been able to get from the tumour before proceeding to do Porro's operation. He doubted whether it was justifiable to proceed to that extreme operation without giving the uterus a chance of recovery. He mentioned that ovarian tumours had been removed, and even a cornu of the uterus, and pregnancy had nevertheless run its course. He thought that in this case an interrupted suture might have been used with a better chance, on account of the peculiar vascular condition of the uterus preventing the shrinking that usually takes place in uterine tissue, giving rise to hæmorrhage. He suggested that a drainage tube might have been placed behind the uterus to get rid of any oozing.

Dr. EDIS said that in a case like this one must be guided by what occurs under one's immediate observation. He regretted that he was not present at the consultation, but he believed that the difficulties in arriving at a correct diagnosis were very great. The fibroid was attached to the uterus low down, pushing the cervix to one side, and the co-existence of signs of pregnancy had led them to conclude that it was a case of extra-uterine gestation. He had reported some months ago a case he had operated upon at the Middlesex Hospital, and he entirely confirmed what Dr. Barnes had said. He agreed that it did not look at all like a pregnant uterus.

A portion of what proved to be uterine tissue had been torn out, and it seemed to him that to leave the patient in that condition would be extremely dangerous. He thought therefore that they would be justified in considering the interests of the mother in preference to those of the fœtus. Of course one recognised the gravity of the operation, but until they had nearly finished they did not know what they were dealing with. Under the circumstances he did not see how Dr. Barnes could have done otherwise. Had one known exactly what it was, possibly one would not have operated, but having operated no other course was open to them.

Dr. BANTOCK said that apart from the circumstances to which Dr. Barnes had called their attention, he had no hesitation in asserting that Dr. Barnes had done the wisest thing in removing the uterus, after removing such a tumour. In looking at the uterus it must strike one at once that the left pedicle was in a very unsafe condition, and probably there would have been hæmorrhage in a short time. Dr. Heywood Smith had suggested a drainage tube behind the uterus in such a case, but he would say that was a proceeding which neither he nor anyone else could do with any satisfaction, for to put a drainage tube behind a five months' uterus would be a physical impossibility.

Dr. HEYWOOD SMITH denied that this was impossible. They could have the tube bent to meet their requirements, or it might be made of a flexible material.

Dr. FENTON said that there was a further difficulty in the diagnosis of this case that had not been alluded to. When he saw the patient outside the hospital he was told it was a case of constipation and accumulation of fæces in the region of the ilio-cæcal valve. On going into the case he found he was dealing with a single woman who denied having had intercourse, and resented to the last the imputation that she could possibly be pregnant. The symptoms of pregnancy were however well marked, and there was this tender swelling on the right side. Taking the whole facts of the case into consideration their first impression was that it was a case of

extra-uterine gestation. Then as to the justification of the procedure adopted, he failed to see anything in the criticisms raised that evening which would put Dr. Barnes in the wrong. He was present at the operation, and there was no question that a great deal of injury was unavoidably done to the uterus in dealing with the spread-out pedicle of the tumour. The tumour had to be dragged up from very deep down in the pelvis on the right side, where it was pressing on the cervical canal, and this was why the sound only passed two-and-a-half inches. It would therefore very likely have presented a formidable obstacle at the time of the passage of the head. Then, again, it was adherent to the omentum. That had to be dealt with, and it entailed a certain amount of bruising and injury to the uterine tissues. If this woman had been allowed to go on with a bruised cervix and omentum, and there had been a miscarriage, and she had got acute peritonitis and died, Dr. Barnes would have been seriously blamed. As it was, he had adopted the courageous and rational course of removing the whole of the uterus and appendages, and the result had been most successful, inasmuch as the woman had preserved her life, and would be able to leave the hospital at the end of the month.

The PRESIDENT said the case was full of interest.' He did not think that it had been entirely made out what she suffered from when Dr. Fenton was called to see her, for he could not understand a fibroid simulating intestinal obstruction. He admitted, however, that no one could well criticise a case which he had not seen, but he could not refrain from saying that the reasons given for proceeding to the operation had not been satisfactorily made out. He did not think that merely pinching the uterus with a Nelaton's forceps was sufficient. He had often even incised the uterus without causing abortion. Of course, if they made an exploratory incision in a case suspected of extra-uterine pregnancy, one would go about it very carefully. He admitted that the difficulties of the case were very great, but he failed to see exactly the justification for the operation. Passing on to discuss the

opinion that had been expressed, that a large cavity could not be left without a drainage tube, he said that plenty of people did without it. It was quite possible to sew up the uterus and get a good result. He did not think therefore that the amount of damage done to the uterus in this case was any indication for Porro's operation. It might have been necessary in this particular instance, but it was not a rule to guide them on future occasions.

Dr. FANCOURT BARNES, in reply, said he would point out that the patient had been complaining of continuous aching pain in the right flank over the tumour. This had been going on for some weeks. Secondly, when she was examined before three or four of his colleagues, under chloroform, they were all more or less of opinion that it was a case of extra-uterine pregnancy. That, of course, turned out not to be the case but, as he had observed, the diagnosis of the case was obscure owing to the presence of the tumour. However, so it was, even when the abdomen was opened, they still thought they had to do with a case of extra-uterine gestation. As regards his having removed the uterus after removing the tumour, he said that of course that must be left in this case, as in all cases, to the judgment of the operator. At the time, when removing the tumour from the side of the uterus, he had not been able to do this without dragging the uterus out of the abdomen. He had been compelled by the adhesions to the omentum and intestines to the tumour to resort to long and trying manipulations, and he was of opinion at the time of operation, that it would be safer to remove the entire uterus.

The discussion on Dr. Dolan's paper was, on the motion of Dr. BANTOCK, postponed until an early meeting in the autumn.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, OCTOBER 9, 1889.

ARTHUR V. MACAN, M.B., PRESIDENT, IN THE CHAIR.

PRESENT : 30 Fellows, 5 Visitors.

The following were elected Fellows of the Society :—
Dr. W. S. Bagot, Dr. Sackheim, Dr. P. L. Mootovsawmy.
The following were proposed for election :—Harry Tuck, M.R.C.S., West Hampstead, London ; Constantin Stekoulis, M.D., Athens, Constantinople ; L. M. Greene, M.D., New York ; John B. Hellier, M.D.Lond., Leeds ; Alfred Edward Hawkes, M.D., Liverpool ; Franklin Townsend, M.D., Albany, U.S.A. ; J. M. Baldy, M.D., Philadelphia, U.S.A. ; H. J. Ostram, M.D., New York.

Dr. BANTOCK showed a specimen of a tumour which he had removed and which, he said, was of interest from a pathological point of view. It had been in existence about eight years. It dragged upon the uterus when moved. He had diagnosed fibroid of the uterus, probably with pedicle. When he opened the abdomen the appearances seemed to confirm this view, but on pressing with a finger he found fluctuation, and on tapping it he withdrew seven and a-half ounces of fluid, containing cholesterin. He then found that it had a pedicle not at all connected with the uterus, and he then thought it must be ovarian, a degenerated cyst, for example. The pedicle was attached to the right broad ligament at the corner of the uterus. There was no connection with the body of the uterus. The patient was a cook, single, and thirty-five years of age. He had operated on October 3rd, and she was now convalescent.

Dr. HEYWOOD SMITH asked Dr. Bantock whether he had

searched for the ovary on that side, also whether there was any case on record of a fibro-cyst containing cholesterin.

Dr. BARNES suggested that the case should be referred to a committee for examination and report.

Dr. R. T. SMITH asked how Dr. Bantock had treated the pedicle.

Dr. BANTOCK, in reply, said he did not think it was at all uncommon for fibro-cystic tumours of the uterus to contain cholesterin, which might be met with anywhere, so that it would not help them to determine the character of the tumour. He said he should be very glad to have the tumour examined by an expert. He himself was disposed to regard it as a fibro-cystic tumour. The pedicle was treated by ligature. The relations of the pedicle to the broad ligament were those of an ovarian cyst, and he thought he was dealing with a case of that sort. The tube was at the bottom of the cyst, probably in consequence of adhesions. In reply to Dr. Smith, he said he did not look for the ovary on that side, because he felt so satisfied at the time that it was an ovarian cyst. It was only after the operation that he had come to a different conclusion.

Dr. EDIS showed a specimen he thought was of interest on account of the clinical history of the case, which was one of epithelioma of the clitoris. The patient was a single woman, forty-three years of age, and the growth had only been noticed a short time before. She complained at that time of severe irritation about the meatus urinarius, sometimes accompanied by pain on passing water, which, however, was not unduly frequent. During the last three weeks there had been a slight discharge from the growth. She was diffident about having it examined by a doctor, but she ultimately consulted one, who thought from her symptoms that she had a vascular growth. She continued under treatment for some months, by which time the growth began to get prominent. The practitioner instituted an examination, and then said it was a vascular growth which ought to be removed, and she was

accordingly sent to Dr. Edis for that purpose. During the last eighteen months it had been gradually increasing in size, but the glands were not in the least implicated. He caught hold of it with a pair of vulsella forceps, and then removed it in its entirety by means of a Paquelin cautery, being careful to avoid touching the tissues that were implicated. The hæmorrhage was nothing to speak of. The wound was stuffed with iodoform gauze, and the patient convalesced rapidly. He had heard from the practitioner that morning and he said the patient had remained perfectly well. That left a clear interval of three or four months, so that at any rate there had been no immediate return of the growth. If, however, the nature of the growth had been suspected a year ago it would have been wise to have had it removed then, but, unfortunately, the practitioner had not made an examination, and so it had been allowed to go on. Dr. Edis mentioned another case in which the practitioner had been attending a case for over twelve months, and had been treating the patient for chancre. As it did not get well and as the glands were still enlarged, the patient was sent to him, but, unfortunately, the case was one of epithelioma, and, notwithstanding that the growth was removed, she died three months later. In the first case he had gone within a sixteenth of an inch of the meatus, but he had been careful to pull it out of the way.

Dr. HILLS deprecated the making of such remarks by Dr. Edis in reference to general practitioners. He said that Dr. Edis must know perfectly well that it does not do in practice to propose an examination at once.

Dr. LYCETT asked whether there had been any trouble in consequence of the cicatrisation.

Dr. EDIS, in reply, said the removal of the growth had left a very small cicatrix not bigger than the end of the thumb. In reply to Dr. Hills, he pointed out that the patient had had irritation for upwards of five years, and had been under treatment for several months. It was not as

though he had only seen the patient once or twice. He thought, therefore, that the criticism was uncalled for.

Dr. BARNES said that in his experience these cases of epithelioma attacking the vulva were very amenable to treatment if taken early enough. He recalled that some seven or eight years ago, he had operated upon an elderly lady for epithelioma of the vulva, and in that case he cut out the diseased structures with a knife, and sutured the edges altogether. The doctors in attendance told him at the time that it would be certain to recur, but it had not done so. In one other case where the patient was quite a young woman, the disease was cut out in the same way, and also with a permanently good result. He hoped, therefore, that Dr. Edis's case would prove permanently successful.

Dr. EDIS also showed a so-called mole. It looked like a polypus protruding from the os. The clinical history was interesting. The patient was a married woman, thirty-five years of age, who had been suffering from severe menorrhagia on and off since January last, flooding for ten days or a fortnight towards the latter end of June, when the loss was profuse. In July, all sanguineous discharge ceased until the first week in September. Then she began to flood again. She went on flooding until she was quite blanched and anæmic, when she was sent to the Chelsea Hospital for Women. He had examined her, and he found the mass protruding from the external os. He removed it by means of a pair of forceps, taking care that there was nothing left behind. Since then the patient had been well, and there had been no return of the hæmorrhage. He observed that there was no doubt as to its being the product of conception. There had been a certain amount of hæmorrhage into the tissues, and it was a very good specimen of what used to be called a mole. Had the patient been examined in the first instance this might have been removed, and she would have been relieved at once. The patient had a miscarriage early in the year, and that was the starting-point of the hæmorrhage. Then the bleeding ceased in the first week in July

and there was no return until the first week in September, an interval of two months. The question in his mind was as to whether this was not the ovum which should have been extruded at the beginning of the year. He suggested that the temporary cessation of the hæmorrhage might have been due to the partial extrusion of the mass from the cavity of the uterus into the cervix.

Dr. HEYWOOD SMITH asked why it should not be described as a molar pregnancy.

Dr. EDIS observed that it was the old traditional mole in which they got extravasation of blood into the chorionic tissues, and which failed to come away.

Dr. BARNES asked to what extent the case justified the theory of cervical pregnancy. He asked how it occurred. He said he was not aware of any cases on record in which this had indubitably taken place.

The PRESIDENT said that he quite understood that the ovum was originally attached to the fundus.

Dr. EDIS said it was distinctly attached inside the internal os, which was very much contracted, and he had to pass a pair of forceps beyond it to make sure of getting it all away.

Dr. LYCETT showed an apparatus which he had been using for some years past, for the purpose of dilating the cervix. It consisted of a metallic cone maintained in position by means of a waist band and two rubber perineal bands. The stem of the cone contained a coil spring, the pressure of which could be regulated by means of a wheel at the base. He said that the nurse could be directed to give a turn to the screw from time to time, so that at a given time the dilatation would be complete. He had used this apparatus for upwards of twelve years and had never had occasion to notice any untoward consequences. The stem could be adjusted so as to adapt itself to the varying length of the vagina.

Dr. EDIS observed that although it was undoubtedly an ingenious arrangement it was open to the objection that if the process involved any discomfort or pain the nurse might omit to put on the extra pressure. He said he would not like to

leave it in the hands of the nurse and he preferred elastic pressure.

Dr. FENTON thought it was a very feasible method of dilating the cervix, although it had something in common with Tait's arrangement for applying elastic pressure. He did not think that the possibility of the nurse failing to put on the extra pressure if there was pain was in itself a disadvantage, for some concession ought to be made to humanity, and moreover, if the proceeding caused so much pain it was a sign that harm was being done. He observed that the instrument would be rather difficult to clean, and he objected to the conical shape of the plug, the effect of this was to dilate the lower part of the cervix and to leave the upper part undilated.

Dr. ROUTH thought that they would be occasionally running a great deal of risk by blindly pushing such an instrument into the uterus, unless the uterus were kept *in situ*, because otherwise the uterus would be pushed up and great harm might be done. He said he had seen cases in which the uterus had been so pushed up and followed by an attack of parametritis. He mentioned the case of the wife of a medical man in whom he had wished to dilate the uterus and the plan he adopted was to pull the uterus down by means of vulsella forceps while dilating. This plan, however, was neither to the taste of the patient or her husband, and the result was that he abandoned that part of the proceedings, and in consequence of the uterus while not kept *in situ* being pushed up she had an attack of inflammation that nearly cost her her life.

The PRESIDENT thought they were putting the censure in the wrong place, for if such terrible consequences always followed pushing up the uterus there would be a much larger number of these cases of inflammation than there were. He did not think that the process was likely to do harm unless the tissues were torn, and then it would be a case of septic poisoning. He would take an attack of peritonitis as evidence that the man had not done his work right. The

question was whether the instrument was effectual, leaving on one side the pushing up of the uterus. He himself preferred a simple incision to any other method of getting through the cervix, a plan that with ordinary precautions was never followed by sepsis.

Dr. LYCETT, in reply, said that he never used the instrument when there was any antecedent mischief around the uterus. He admitted that some care was necessary to keep the instrument clean.

Adjourned discussion on Dr. DOLAN'S paper.

Dr. BANTOCK observed that so long a time had elapsed since the paper was read that he thought he would not be doing an injustice to any one if he suggested that the recollection of it had faded, but he hoped that they had all of them a printed copy of it before them. He said that Dr. Dolan had approached the subject in a very philosophical spirit, discussing the matter, with one or two trifling exceptions, in a manner devoid of prejudice. He had started with a plea in favour of specialism, and pointed to the benefits accruing from the division of labour even in the medical art. His opinion was that in the course of time the process of evolution would go on until they had two orders of physicians, family and consulting. He said that it was a growing opinion that specialists should be for some years general practitioners. He did not know what his authority was for that statement, but he quite agreed with it. He mentioned an instance which occurred a few years ago and caused at the time a great deal of commotion in a special hospital by a mistake in diagnosis. A patient was admitted and the next morning she presented a well-marked rash, which was taken to be that of measles. Fortunately it turned out to be a simple case of erythema, which a man in general practice would have diagnosed at once. He had, therefore, not the slightest doubt that a few years spent in general practice was a valuable education for a

specialist. He felt that the years that he himself had spent in general practice had been of the greatest service to him. Dr. Dolan went on to say that the fields of general practice so far as the diseases of women were concerned, opened up a wide field sufficient to satisfy any ordinary ambition, and in that view he, Dr. Bantock, cordially agreed. To illustrate his proposition, Dr. Dolan went on to consider a group of symptoms which in their importance have almost claimed for themselves the dignity of a special disease. These were the disorders of menstruation, and he rightly gave them the first place in his consideration. He had called special attention to amenorrhœa, a condition in reference to which the practitioner was so often wilfully misled. He insisted upon the importance of special care in such cases, and here crept out one of his prejudices—using the word in its least offensive sense—in speaking of the sound as “that instrument of destruction.” He could not conceive why Dr. Dolan had singled out the sound in this way, for he, Dr. Bantock, considered it a most valuable instrument for diagnostic purposes. Of course it must be used carefully and intelligently, and he would be very sorry to be deprived of it. There were many diseases in the diagnosis of which it was of the utmost value. Where injury followed its use the inference was that it had been used unskilfully or in improper cases. He regretted that Dr. Dolan was not present to explain why he had thus characterised it. He quite agreed with what Dr. Dolan had said with reference to the routine use of iron in anæmia and chlorosis as being faulty and inefficient. He himself generally gave a mixture of sulphate of iron with sulphate of magnesia. Then, too, he spoke of “the opprobrium of gynæcology,” *i.e.* the use of pessaries, or rather the treatment of uterine displacement by pessaries. He could not agree with him in his condemnation of this method of treating displacements, or at least some of them, although he said he was supported by some of the ablest gynæcologists in England and America. If there was one department in which he (Dr. Bantock) derived satisfaction it was in the treatment of displacements,

and particularly retroversion. He had laid his views before the profession on this subject, and he would therefore not recapitulate them that evening. Dr. Dolan, however, confined himself to the treatment of flexions of the uterus, but he (Dr. Bantock) had always preached the doctrine that a pessary was no good in cases of flexion, however useful it might be in versions. If Dr. Dolan had been in the habit of treating flexions by means of vaginal pessaries, he could readily understand how he had arrived at his conclusions. He quoted a sentence from Scanzoni which he (Dr. Bantock) had made the text for some remarks in his little book on "The Use and Abuse of Pessaries." He said that "flexions of the uterus were not dangerous unless complicated by some change in the texture of that organ." He was quite prepared to admit that in a few cases in the early stages of displacements this might be the case when there were few symptoms, but in the course of time the circulation was interfered with, congestion supervened and the patient then got symptoms. When the source of the congestion was removed, then the discomfort disappeared. He would like to know a little more about the women who were treated at the Halifax Infirmary for flexions. He observed that it was really remarkable how little this subject was studied, for he might say with Dr. Dolan, that he had had a great deal of experience in removing pessaries, but he had also some experience in applying them. A pessary was not intended to replace a uterus, but to retain it in position. Dr. Dolan had done him the honour to say that his book fulfilled many of the conditions required in a text book. He complained, however, that he (Dr. Bantock) had not written more about the dynamics of pessaries, but he asked what earthly good it would have been. He asked who, in obstetrics, paid any attention to these highly technical considerations. He observed that Dr. Dolan seemed to favour some of the more risky operations which had been invented, removal of the appendages, shortening of the round ligaments, perinæorrhaphy, &c. So far as the removal of the tubes was concerned, and in respect of the restoration of the perinæum he

would agree with him, but as to the question of shortening the round ligaments, he observes that it had yet to be proved that this was the proper treatment for displacements of the uterus. He had never yet seen a case in which he had felt justified in performing so serious an operation. It was very evident that the round ligaments had nothing whatever to do with the position of the uterus, and how the shortened round ligament was going to support the uterus, which had lost its other supports, he could not imagine. Another practice which had found favour with him, the suturing the fundus to the abdominal parietes, was one which experience had failed to ratify. Time would not permit of his following the author further, but he would commend the paper to the earnest study of the gynæcologist and of the general practitioner. It was very carefully written, and he thought that none could read it without being the better for it. With reference to the questions of new remedies, he was very much afraid that the gentlemen who were so exceedingly ingenious in bringing forward new pharmaceutical preparations, were thinking more of their own pockets than of the scientific value of their preparations. Coming to the relations of the specialist to the general practitioner, he said this was the most important part of the subject, the other being only preliminary. He attached a great deal of value to Dr. Dolan's opinion on the subject, coming as it did from a general practitioner of large experience, because coming from a specialist they might appear to be interested. He had pointed out that there need be no antagonism between the two, assuming of course that the latter behaved in an honourable manner towards the general practitioner. He spoke in comforting terms of his own relations with specialists, and pointed out that certain specialists, who do not show any regard for this unwritten code have made themselves pretty notorious, and are consequently easy to avoid. Still it did sometimes happen that the consultant got into trouble from a want of thought on the part of the general practitioner. He instanced a case which had occurred to himself. A lady had announced to her medical man that she wished to consult

him (Dr. Bantock), and this gentleman had offered to write to him to explain the previous history of the case. This he did, but as a matter of fact, the lady had come to him fully determined to place herself entirely under his treatment. He consequently wrote to her medical man to that effect, and received in return a letter of violent abuse, accusing him of having taken away his patient, and asking if he would consent to arbitration. To this question he replied that he would gladly submit to arbitration, and probably this satisfied the medical man for he had heard nothing from him on the subject. He pointed out that the medical man was entirely in the wrong. In conclusion he specially commended the last two paragraphs to the notice of both specialists and general practitioners.

Dr. BARNES, as the hour was too late to continue the discussion, proposed the adjournment of it, as he would like to say something on the subject.

Dr. FENTON seconded the motion.

Dr. ROUTH suggested that the subject of ethics was better fitted for a general society, and said it would be a pity to occupy more time.

The motion was put to the vote and was lost, the President giving the casting vote against the adjournment.

The Society then adjourned.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, OCTOBER 23, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT : 27 Fellows, 3 Visitors.

The following were elected Fellows of the Society :—Dr. C. Stekoulis, Constantinople ; Dr. H. Tuck, Dr. L. M. Greene, Dr. J. B. Hellier, Dr. A. E. Hawkes, Dr. F. Townsend, Dr. J. M. Baldy, Dr. H. G. Ostrom.

The following was proposed for election :—Dr. J. K. F. Naumann, London.

Case of Ante-uterine Abscess presenting in the Vagina, caused by a silk ligature which had been applied to the pedicle of an ovarian dermoid cyst six months previously. The ligature came away when the abscess was opened per vaginam.
By FRED. BOWREMAN JESSETT, F.R.C.S.Eng., Surgeon to the Cancer Hospital.

THE case I wish to bring before the Society this evening cannot boast of the dimensions of the two last cases recorded, as all I have to show you is a ligature. The case is however, I think, of sufficient interest and importance to warrant my briefly relating its history.

Mrs. N—— was operated on by Dr. Kelly, of Philadelphia, in May of this year ; he removed the left ovary and tube for a large suppurating dermoid cyst. He writes : "In her convalescence she had a large hæmatocele ante-uterine, which is slowly undergoing contraction."

The patient suffered a good deal of pain and distressing irritation of the bladder, which increased in severity, and she was advised to come to England to consult me.

On October 2nd I saw her, and on making a vaginal examination a large elastic swelling was found occupying the anterior wall of the vagina, pushing the uterus upwards and backwards, extending more to the left than to the right side. The examination caused considerable pain. The most distressing symptom, however, was the constant irritation of the bladder, which prevented her sleeping at night and caused her to desire to micturate every few minutes.

She says she had had no rigors or rise of temperature. The diagnosis lay between hæmatocele and abscess. I was inclined to suspect the latter, and suggested that she should allow me to pass a fine aspirating needle into the swelling and if pus was found to open it up freely.

This the patient readily consented to, and on October 4th I introduced a needle and withdrew a small quantity of pus. I then passed a director into the opening and with a curved bistoury opened the abscess freely, letting out a quantity of thick curdy pus. The cavity was washed out with iodine and water, and during the process the ligature which I now show you escaped. I introduced a large-sized drainage tube and syringed the abscess cavity out two or three times a day for the next two days, when the tube was withdrawn and the vagina kept thoroughly washed out. The patient made a speedy recovery, and all her symptoms vanished. She is now quite well.

The ligature was an ordinary Chinese silk double ligature, the same as is usually used for ligaturing the pedicle of an ovarian tumour.

Remarks.—This case is of importance for many reasons :

(1) The fact of a ligature which evidently was from the pedicle of an ovarian cyst having become the seat of localised peritonitis and abscess which ulcerated through the parietal peritoneum into the cellular tissue, and presented in the vagina, where it eventually, after the abscess had been opened, escaped.

(2) The total absence of all symptoms of an accumulation of pus, viz., rigors and high temperature.

(3) The importance in such cases of doubt of confirming the diagnosis by passing a fine aspirating needle into the tumour, to determine its true character. Had this been done in the first instance probably pus would have been discovered and opened, and the patient saved many months of suffering.

The PRESIDENT agreed that it was an unusual and an interesting case, and observed that the ligature appeared to have been applied in a figure of eight.

Mr. BOWREMAN JESSETT said it was a double ligature.

Dr. R. T. SMITH said his experience confirmed the possibility of the existence of pus without rigors, and he mentioned the case of a girl, aged twenty-one, who came to him last year suffering from what seemed to be simple anæmia. He ascertained, however, from her mother that she was constantly passing water, and on examining her he found an enormous pelvic abscess from which he withdrew $1\frac{1}{2}$ pints of pus.

Dr. EDIS observed that aspiration had been much neglected in this class of cases. In times gone by he had used the aspirating needle pretty frequently, but now he had not had recourse to it for a long time. He pointed out that in hæmatocele, for example, the blood was never liquid enough to flow away through the needle, and the information obtained was generally negative. On the whole, the aspirating needle did not give as much information as one imagined, for even pus was often too thick to come away, and this might mislead them. In any case they ought not to use too fine a cannula. He remarked that in hæmatocele the puncture was often followed by more rapid absorption, even when they did not succeed in withdrawing any of the contents.

Dr. BANTOCK said that he was happy to say that he had not had any experience of that kind. He could only remember one case in which the ligature had come away. It was a case in which a large number of ligatures had been applied, and the tumour having opened up the peritoneum there was scarcely any left to work on in closing the wound. He wished particularly to call attention to the very remarkable condition of the ligature; he did not know whether it was Dr. Kelly's

custom to leave his ligatures so long, but in this instance there was more than half an inch left over at all the four ends. Under these circumstances he was not surprised that trouble had followed.

Mr. LAWSON TAIT agreed that it was a very badly applied ligature. He mentioned that in the course of a conversation with Mr. Jessop, of Leeds, that gentleman had mentioned to him a case in which he had had to remove two ligatures after the removal of an ovarian tumour, and he had been asked how often the same thing had happened to himself. He was only able to remember two of them; two bad cases of pyo-salpinx, and in both cases he attributed the accident to the employment of a drainage tube impinging upon the ligature and preventing it healing over. He recalled a discussion which had taken place in one of the medical journals in which Dr. Burton, of Liverpool, had asserted that the condition of a distended tube might be diagnosed by means of the symptoms, that the presence of pus would give rise to elevation of temperature, and that the absence of fever indicated that no pus was there. Within a very few days after that statement he had abundant opportunity of proving the fallacy of that assertion in his own clinique. The first case was that of a lady of high social standing who was suffering from hæmorrhage consequent on the presence of myomata, but who declined to consent to the removal of the appendages. He therefore treated her by means of pencils of sulphate of zinc introduced into the uterus. This was done twelve or thirteen times without any bad effects, but on the next occasion she became very ill. There were three of them in attendance upon her until she died. Her medical attendant suggested that it might be a case of peritonitis, but the others ridiculed the idea because there had been no elevation of temperature. On opening the abdomen they found pints of pus. Over and over again he had seen this occur in the tubes and broad ligament without any rise of temperature. He did not know whether the same thing obtained elsewhere, but it was certainly not unfrequently the case in the pelvis.

Dr. FENTON asked whether the explanation was not rather that the pus was loose, so to speak, in the peritoneal cavity. He suggested that a rise of temperature was rather associated with tension, and that when there was no tension then febrile symptoms were absent. In confirmation of these views he mentioned that he had on one or two occasions opened hard masses in the pelvis when the temperature was high, 105° for example, with frequent rigors. He had expected to reach pus, but on the contrary only a little serum came away. Nevertheless the relief of the tension had led to a fall in the temperature and the disappearance of the rigors.

Mr. LAWSON TAIT said that Dr. Fenton's explanation was valueless because it was not true of all the cases. In puerperal peritonitis they might have marked exaltation of temperature and pulse without suppuration. Moreover, they might have a small quantity of pus in a Fallopian tube giving rise to high temperature, but the same condition of affairs often caused no such symptoms. He understood that if pus were present in the knee joint it always gave rise to fever, but that was certainly not the case in the pelvis, otherwise such a blunder as he had described would never have occurred.

Dr. BARNES said the matter had been before them for discussion on a previous occasion, and he had then expressed his conviction that pus in the peritoneum did not necessarily cause rigors. At the same time he thought there was something in Dr. Fenton's explanation, if the tension were due to pus. He suggested that the reason why they did not get a rise of temperature with pus in the peritoneum was that there was no tension and not necessarily absorption of pus into the blood. It was the absorption of the pus into the blood that caused the rigors and fever. When pus was confined in a tense bag as in certain parts of the body, exosmosis and absorption inevitably took place and there was fever. In peritoneal accumulations these conditions did not obtain, and therefore the fever was absent.

Dr. BEDFORD FENWICK mentioned that he had seen cases in which one side of the pleura had been filled with pus, and

yet in which there had never been any marked rise of temperature. In a case recently under his care, the autopsy revealed a pericardium distended with pus, and yet one of the most remarkable symptoms during life was a constantly sub-normal temperature.

Mr. BOWREMAN JESSETT said he did not look upon a rise of temperature as any criterion in peritonitis. With reference to Dr. Fenton's explanation, he remarked that in his case the pus was not in the peritoneal cavity, but was limited to a small space. That was a special point to which he wished to call attention. There was probably some cellulitis as well as peritonitis. This surprised him the more as he was accustomed to expect a rise of temperature in cellulitis.

Dr. R. T. SMITH showed a large fibrous tumour removed in the ordinary way by him on the preceding Monday from a patient, aged forty-nine years, single, who had been under his care for about five years. She was a lady's maid, and until within the last twelve months had been able to work with a fair amount of comfort by taking a good deal of rest. Last year, however, the menorrhagia had increased until it was almost constant. She had been in the hospital four months, and for the space of three months had been submitted to a thorough course of treatment by electrolysis. No benefit had, however, followed the course. The uterus measured $3\frac{1}{2}$ inches long, the sound never passing further than that. Both the positive and the negative electrode had been introduced into the uterus, and the highest tension recorded by Thistleton's galvanometer was 200 milliamperes; this was applied for ten minutes at a time. The only effect was to cause a good deal of pain. Last Monday, therefore, at her request he removed the tumour, and she was now doing very well. The pulse was 80; the temperature normal. In addition to electrolysis he had tried curetting the uterus, but it had failed to afford any relief. The operation held out every hope of being a complete cure. (*Note, November 2.*—Recovery perfect.)

Fibro-cyst of uterus. He then showed a second specimen which was too large to pass round, removed from a single

lady, fifty years of age, whom he had first seen at the hospital three weeks ago. He had, on seeing her, at once made an intuitive diagnosis of cancer. The tumour reached up to the sternum, and ascites was also present. There was a solid growth in the right iliac region, and the inguinal glands were enlarged. The veins on the lower part of the abdomen were somewhat distended. When it was a question of deciding on the treatment some of his colleagues had suggested that it was not malignant, and one thought it might be a fibroid of the ovary. They therefore performed abdominal section.

On opening the abdomen a thick layer of jelly-like material (enclosed in loose tissue) was met with. This bled most profusely on manipulation, and was increased by any attempt at ligature, as this only broke down more of it.

The fibroid tumour in the iliac region was moveable, but the tissue mentioned above extended the whole breadth of the abdomen and looked like cancer, affecting the omentum and intestines. The wound was, therefore, closed, after applying perchloride of iron to the bleeding portion. The iron, with the pressure of the bandage, prevented any further loss, as was found at the *post-mortem* on the fourth day.

He said he had never before seen a specimen comparable to this now shown. This jelly-like material proved to be a huge fibro-cystic tumour of the uterus that had undergone degeneration, and the greater part of the tumour consisted of material like lymph or soft decolourised blood, but rather more gelatinous than these usually are. This material was partly enveloped in portions of cyst wall, and partly free, and mixed with blood. The lower portion of the cyst was intact (the whole being the size of a foot-ball), and was attached by a pedicle, the size of one's little finger, to the fibroid, which had been diagnosed during life. This latter was the size of a cocoa-nut, and sprang from the uterus, and was partly imbedded in the right broad ligament. From the left horn of the uterus another fibroid, with small pedicle, had arisen; the tumour was partly solid, but the core of it was composed of a pultaceous material. The mesenteric and inguinal glands were large and pink.

The patient said she had had a swelling in the abdomen for four years ; it had developed more rapidly of late, and the fact that in a week's time in the hospital the abdominal girth had increased three inches had been one very suggestive of cancer.

Dr. Smith referred to the pathological interest of the case as showing one way in which fibroids proved fatal, to the facility with which the greater portion of the tumour could have been removed by an earlier operation, and to the futility of electrolysis in such a case.

Dr. HEYWOOD SMITH asked what the author meant by the woman dying of shock three days after. He suggested that the specimen be referred to a sub-committee for examination and report.

Dr. EDIS asked whether it had been sufficiently examined to demonstrate that it was really uterine, and whether the ovary was separate and distinct.

Dr. R. T. SMITH, in reply, said the patient did not have any pain after the operation ; the temperature did not rise above 99°, and she simply sank and died of exhaustion. The tumour was purely uterine.

Case of Hysterectomy. By W. H. FENTON, M.D., M.A., Assistant Physician to the Chelsea Hospital for Women.

DR. FENTON showed a specimen of fibro-cystic tumour of the uterus, which he had removed a week previously from a patient in the Chelsea Hospital for Women who was doing exceedingly well, not having looked back in any one particular since the operation.

The following is the description of the tumour from the pen of Mr. Bland Sutton :

“The specimen consists of the fundus uteri and left uterine appendages (ovary, with its ligament, and the corresponding Fallopian tube).

"Incorporated with the fundus of the uterus is a tumour with a cystic interior, which in its empty and shrunken condition is as big as a large cocoa-nut. The tumour and fundus uteri are so intimately connected, that it is impossible to tell accurately where one begins and the other ends. On the cut aspect of the specimen is a space lined with mucous membrane; each angle of this cavity leads into a Fallopian tube; this space is the upper inch of the uterine cavity. The top of the tumour is covered with nodular outgrowths varying in size from a pea to a cherry. In one place an adhesion has occurred between the tumour and omentum. The centre of the tumour is occupied by a cavity with irregular walls, from which ragged villous-like processes project, but it has no definite lining membrane. The specimen is what surgeons call a fibro-cystic tumour. This means a *soft myoma*, the interior of which has undergone myomatous degeneration, and a fluid-containing cavity is the result.—J. BLAND SUTTON."

Dr. Fenton added to this that prior to operation the tumour reached to the umbilicus and filled the false pelvis. During the operation forty-eight ounces of clear fluid resembling urine were evacuated from the cyst. It was noted too that the fluid was clear and by no means viscid.

Mr. Bland Sutton, in forwarding the above report to the operator, made the following remark: "This tumour must, I should say, have been a rare clinical puzzle." This was assuredly the case, as shown by the diversity of opinion as to what was the right course to pursue with regard to it. The patient was a widow 54 years of age who had borne several children. Her menstrual flow, notwithstanding her age, recurred with unfailing regularity as to time, but of late had been becoming more and more copious. She was getting very helpless and dependent on others; with great difficulty had she performed several weary pilgrimages to Dr. Fenton's out-patient department at Chelsea during the six weeks she had been under observation. There was no question that growth of the tumour was taking place. It was eight years since she

first noticed a swelling, and for a long time but little change had been observed in its size till shortly before seeking advice in London.

The tumour, as has been said, reached the umbilicus it rested on the brim of the pelvis below, blocking the inlet. The upper part of the swelling was elastic, but no other evidence of the presence of fluid was available. The anterior surface of the abdomen was absolutely dull on percussion, the flanks resonant. What could be felt of the mass from the vagina was apparently solid and part and parcel of the uterus. A sound entered the uterine cavity in an upward direction for some four inches. It was difficult to pass, running in with a sudden jerk after some coaxing. It certainly passed in upwards of four inches, but was not pushed home.

Dr. Fenton, in view of the recent rapid increase in growth, the poor woman's miserable plight, and the steadily advancing losses of blood, was for immediate operation. In this he received the moral support of both Dr. Edis and Dr. Fancourt Barnes. On the other hand there was a very strong opposition to such radical measures. One physician wanted more time to watch the case, although it had been already observed for six weeks, during which time it had grown remarkably, and the poor thing had been at much expense and suffering in presenting herself for observation. Another suggested that sufficient palliative measures had not been tried. The obvious answer to that was another question, viz., What are the palliative measures which are likely to benefit either a rapidly-growing soft myoma, or a fibro-cystic tumour of the uterus? The suggestion was a pessary. Dr. Fenton was prepared to admit that in these days there was no lack of these instruments; but he asked the Society, out of all the cranks and hobbies in this line, could any Fellow tell him of one single pessary that would take the weight of this tumour and its forty-eight ounces of fluid, plus the abdominal tension, off the brim of the pelvis, and the important structures passing over the brim? How was the pessary, too, to arrest the growth of the tumour? Drugs, the next suggestion. Well, ergot had

been freely given. What other drug had really been proved to have any undoubted influence on the growth of these tumours? Needless to say, electrolysis was put forward as a palliative measure, but with no very definite suggestions as to time, strength of current, number of applications, nor—what Dr. Fenton thought most important—any statement as to what the electrolytic treatment is to aim at. The disappearance of the growth is not looked for—even its being checked is no certainty. Its pressure symptoms might not be affected. The increasing periodic losses might be checked. But after all the patient might still have to be subjected to hysterectomy. Dr. Fenton felt he would not be doing his duty in submitting his patient then, to what after all was mere empirical treatment—about which much was uncertain, and little proved. On the other hand, hysterectomy—an absolutely certain cure—could be and was offered the poor woman, and surely the event justified over and over again the course pursued. Dr. Fenton mentioned that he had used his improved *serre-nœud* in dealing with the pedicle, and stated that it had been used not only by himself with great comfort in controlling thick pedicles, but by Drs. Edis, Fancourt Barnes and Travers on several occasions. Indeed, in one case where Mr. Lawson Tait's more recent *serre-nœud* had been employed, recurrent hæmorrhage had taken place, and his *serre-nœud* had to be applied over Mr. Tait's to save the woman's life.

Mr. LAWSON TAIT said that his *serre-nœud* had been not used but misused. It ought never to be pulled back to its full extent, since that would allow nothing for the shrinkage of the tissues.

Dr. FENTON said he found that as a matter of fact it had not been pulled back to its full extent, as he had stated, $1\frac{1}{2}$ inches having been left.

On the motion of Dr. RUTHERFOORD the specimen was referred to the sub-committee for examination.

In reply to Dr. Bedford Fenwick, Dr. FENTON stated that the fluid contents of the cyst had unfortunately been thrown

away when clearing the table for the next operation, and he had been unable to have it examined.

Table of 238 Cases of completed Ovariectomy (163 to 400 inclusive) with Remarks by GEO. GRANVILLE BANTOCK, M.D., F.R.C.S.ED., Surgeon Samaritan Free Hospital.

As an appendix to a paper on "Hyperpyrexia after Listerian Ovariectomy," read before the Royal Medical and Chirurgical Society in December, 1880, I published a table of 162 cases of completed ovariectomy. The accompanying table carries the number to 400, and it will be interesting to compare the state of the Listerian method then with what it is now. In 1881 there were only two men, as far as I know, who ventured to perform ovariectomy without a rigid observance of all the details of the Listerian method. These two men were Mr. Lawson Tait and myself, and it is a fact worthy of repetition that we were working quite independently of one another, neither, as far as I am aware, knowing what the other was doing. At that time the method in question was in full swing; the belief in it, however ill-founded subsequent experience has shown it to be, was firmly rooted in the professional, and even in the public mind, and any one who ventured to express his disbelief, and especially who dared to ignore it in practice, did so at his peril. The younger race of practitioners, and especially men fresh from the medical schools, all talked glibly of the antiseptic method, and stood incredulous at the bare idea of performing even the most simple operation without "full antiseptic precautions"—as the phrase went. Every successful operation was due to the observance of the Listerian method, every failure to some fault in its application, and the most absurd explanations of the latter were forthcoming, and gravely put forward. Much ingenuity was exhibited in this way, and the imagination was allowed free play. I shall not again go over the ground covered in my inaugural address on "Listerism" before this Society, to which no one has yet ventured a reply.

What is the state of the question now? Simply this, that, in this country at least, it is a very rare thing to see the spray in use at all. For the most part it is to be seen put to a purpose for which it was never intended by its inventor, *i.e.*, playing upon the ceiling, or against a wall, or anywhere but on the field of operation. This is at best a most illogical proceeding, and I am quite at a loss to understand the process of reasoning—if there be any—which leads to such a practice. In the Samaritan Free Hospital it has been discarded by all my colleagues with one exception. I am making no assumption when I say that this is due to the superior results which I have obtained there since I reverted to a more rational and more simple method.

Still the belief in so-called antiseptics has a firm hold on many minds, and, although the belief in the efficacy of the spray has well nigh died out, it is not so with other details of the method. For whether it be carbolic acid, or corrosive sublimate, or boracic acid, or whatever it may be, few operators venture to perform an operation without employing one of these agents for the hands, sponges, and instruments.

I have frequently been asked the question, "Would you open a knee joint without using an antiseptic?" My answer has been "Yes, most certainly, if the opportunity offered," for I see no difference between the serous membrane of the knee joint and the abdominal cavity.

I have said that I am making no assumption when I say that my results in the Samaritan Free Hospital have led to the almost complete extinction of the spray in that institution. What are these results? I confine myself to the cases of ovariectomy, and I now record it as a fact that from April, 1885, to October, 1888—a period of three years and-a-half—I did not lose a case in that hospital with a series of ninety cases. On the other hand, during this period the mortality under the Listerian method exceeded 12 per cent. Moreover I affirm, without fear of contradiction, that my patients recovered with less pyrexia than under the carbolic acid treatment.

It is, therefore, to me a source of much gratification now, and a set-off to the obloquy and misrepresentation to which I was subjected a few years ago, that I have the reward of seeing my views triumphant. I was justified in expecting this, for it was not the result of prejudice or vain speculation, but of a rigid attention to and a careful study of observed facts that I was enabled to arrive at the conclusions I reached.

I have deemed it advisable and even necessary to recur to this question once more—I hope for the last time—for I am constantly learning that there still exists a belief that I employ some so-called antiseptic in my operations.

Once more then let me say that for my hands, instruments and sponges, I use plain water ; that I take no precautions to sterilize it, as it is called, by boiling ; that I regard water that is fit for drinking and household purposes generally as suitable for the purpose of any operation ; that while the water is heated—but not necessarily boiled—I have no hesitation in cooling it down, if too hot for my hands, with cold water drawn fresh from the tap, as for instance, when washing out the peritoneum, and that I pay the greatest attention to cleanliness and see that all utensils are as clean as water can make them. I wash my hands very carefully before commencing an operation, making them as clean as soap and water and a nail brush can make them, and I frequently cleanse them during the operation. I go so far as to use the nail blade of my pocket knife for removing all matter from under my nails after washing, without adopting that refinement of absurdity which consists in previously passing the blade through the flame of a spirit lamp, and I refuse to follow the teaching of Goodell, who regards it as a dangerous practice to disturb the germs or microbes, lurking under the nails. As a covering to the wound I employ simple absorbent gauze, perfectly innocent of any germicide or foreign substance. And such is my disbelief in the hurtfulness of “germs,” that, were it not for other considerations, I would leave all my wounds exposed to the air—as for example, I have sometimes done in amputation of the breast, and always do in the operation for restoring a ruptured perineum.

What, then, are the results of this method, speaking generally? They are these, viz., that while in my first hundred ovariectomies, the majority having been done under the Listerian method or a modification of it, I lost nineteen cases, in my second hundred, while I was gradually abandoning this method, the mortality fell to fourteen; in the third hundred all performed with plain water the mortality was eight, and in the fourth hundred it was only four. In what I may call the general part of gynæcological surgery my perineal operations are out of hand in a fortnight, and it is a rare thing to see a breast case otherwise than practically well in a week.

In several particulars my practice now differs materially from that of nine years ago in the general management of an ovariectomy.

(1) *Washing out the peritoneum.**—The first case in which I resorted to this practice was nearly five years ago, viz., on November 13th, 1884. It happened thus: On November 12th I was consulted by a married lady, aged thirty-nine, the mother of two children (No. 268 in the table). In the course of examination and while endeavouring to push up a tumour lying in Douglas's pouch, for the purpose of determining whether it was movable and a fibroid or not (there being some fibroids in the uterus also), suddenly I felt something give way and the tumour disappeared both from the pelvis and hypogastrium, leaving the uterus with its fibroids to be clearly made out. As soon as possible I made arrangements for abdominal section, but these could not be completed until the following morning. In the course of the evening of the same day there was a slight rise of temperature to 99·4, with some uneasiness in the lower abdomen, but on the following morning the temperature had returned to its normal standard. As soon as the peritoneum was opened a dark-coloured fluid like thick coffee welled up. After removing the ruptured ovarian cyst I freely washed out the peritoneum

* I have already given Mr. Lawson Tait the credit of having introduced this practice, and have therefore thought it unnecessary to repeat it in the text.

with warm water, using a quart jug for the purpose, and put in a drainage tube. The patient made an uninterrupted recovery and is still in very good health. The fibroids have given her no trouble. I did not use it again till March 16, 1885, when I encountered a case in which there was active peritonitis with recent parietal and pelvic adhesions and a great deal of free fluid in the peritoneal cavity. Since that time I have resorted to it very often and with increasing frequency until it has become the rule to employ it whenever any ovarian fluid has been spilt into the peritoneum, or there is any bleeding from torn adhesions. At first I used whatever came most conveniently to hand—a pint or a quart jug, or a clean Higginson's syringe—but for a considerable period I have used Lawson Tait's apparatus, which I am sure he will forgive me for saying I believe I have improved by adding a ball free from valves to facilitate the starting of the siphon action. A full stream of water, such as this apparatus gives, removes all clotted and fluid blood, serum, debris of a broken-up ovarian tumour, or fibrinogen much more effectually than it is possible to do by any other means, and without any irritation of the peritoneum. It is especially useful, as has already been pointed out before this Society, in cases of ruptured colloid tumour, for the warm water rapidly dissolves out the colloid matter which in these cases is so frequently found attached to the omentum, appendices epiploicæ, &c. I have never known any evil result follow its use, but I have several times regretted that I did not resort to it. Nor am I at all particular in getting all the water away. Sometimes, as for instance in the case of large tumours, the intestines will not descend into the pelvis before it is time to close the abdominal wound, and a cavity filled with air would be left in the pelvis. In these cases I leave sufficient water to fill up the space to come away subsequently through the drainage tube. Again, in the case of ruptured colloid tumours, every one who has had any experience knows that the peritoneum is usually covered with a very delicate layer of capillaries, the slightest sponging of which causes serious injury and oozing. In these

cases also I remove no more water than comes to the surface.

At the meeting of the Society on November 14th, 1888, I called attention to a fatal case under the care of Dr. Polaillon, in which death was attributed to the washing out of the peritoneum. This case was reported in the *Journal de Médecine de Paris*, October 28th, 1888, and in the *Bulletins et Memoires de la Société Obstetricale et Gynécologique de Paris*, Seance de Novembre, 1888, and is as follows :—" In consequence of the effusion of blood into the pelvis, Dr. Polaillon washed the peritoneum with distilled water, which was boiled and carbolyzed to 1 per cent., and used at a temperature of 37° (C) or 98·6 (Fahr.) by means of a glass tube, which carried the stream to the bottom of the pelvis. The washing had been continued for two or three minutes when all at once the respiration quickened, then became shallow, and finally ceased. The face became livid, but the heart continued to beat regularly. This was at a quarter-past ten o'clock. Artificial respiration was at once practised, and continued methodically. At eleven o'clock, respiration not being restored spontaneously, an incision was made for tracheotomy. A few feeble respirations followed and continued regularly for ten or fifteen minutes. The face became less livid; the pupils were half contracted, the heart beat regularly and rapidly, but consciousness did not return. Advantage was taken of this improvement to close the abdominal cavity and complete the dressing, the pedicle being kept outside, secured by two pins and an elastic cord. In spite of the inhalation of pure oxygen, and various other means which need not be mentioned, respiration could not be established in a durable manner, and artificial respiration was again resorted to. An attempt to bleed from the arm yielded only a few drops of black blood. The heart beats became more and more quick, feeble and irregular, but there was no spontaneous respiration. Soon the heart beats were no longer perceptible; the face became more and more pale; some gas escaped from the anus; the pupils dilated. Within a few minutes of twelve o'clock death was incontestable.

"The administration of chloroform had lasted thirty-five minutes, and nearly forty grammes (about ten fluid drachms) of chloroform had been used. The quantity of chloroform absorbed by the patient cannot be exactly determined, but by reason of the evaporation it was certainly much less than the amount employed.

"This death has not for its only cause the action of chloroform, as some will not fail to say. In my opinion, we must also blame the washing out of the peritoneum."

Dr. Polaillon then refers to two other cases in which respiration was temporarily arrested at the moment of the injection of very warm water, but in these two cases it was re-established. In the case in question he says he had already poured two litres of warm antiseptic water into the pelvis, and as it flowed over very much tinged with blood, he poured in another which was accidentally much warmer than the preceding. The pelvis being full of water this injection extended to the upper part of the abdomen. "It was at this moment," he says, "that the respiration became arrested." He believes that it was the contact of this hot water with the diaphragm or the solar plexus which produced an impression, which by reflex action provoked the arrest of respiration and syncope, and he compares it with the effect of a blow on the epigastrium. He adds, "the combined action of the chloroform and the warm injection caused the death of my patient; but I am convinced that the injection was the principal cause."

When I first called attention to this case I gave it as my belief that the death was due to carbolic acid poisoning. In this view of the case I am glad to find myself supported by Professor Japp Sinclair. It would appear that the attention of the operator was taken up with attempts at restoring the respiration, and that nothing was done—at least for a considerable time—in the way of removing the carbolised water from the peritoneal cavity. Hence with the continuance of the circulation, it is a fair assumption that absorption continued, though in lessening degree during all this time. That Dr. Polaillon was right in attributing the fatal result to the

injection, and absolving the chloroform I am fully convinced, but I am equally convinced that he entirely overlooked the part played by the carbolic acid.

In a recent number of the *Annales de Gynécologie* (September), Dr. Pierre Delbet has published an interesting series of reseaches on this subject. With regard to his conclusion that, because foreign matter cannot all be removed from the peritoneum by flushing, it is best to employ an antiseptic solution, I shall only say that experience does not bear him out. His experiments tend to show that the temperature of the water within the limits of 65° to 122° (Fahr.) has no appreciable effect on the respiration or circulation, but that a low temperature by its chilling effect increases shock. He is of opinion that in Dr. Polaillon's case the carbolic acid or the anæsthetic may have had the principal share in the fatal result, thus absolving the mere act of flushing, and he doubts the alleged hæmostatic action of very hot water. He points out that during the first minutes a great quantity of water is absorbed, and that when salt in the proportion of seven parts to one thousand of water is used the process becomes "a true indirect transfusion." It is probable that with water alone the same result would be obtained. Hence we can imagine that this process might be of service in lessening the shock due to loss of blood, the suggestion of which is claimed by Dr. Gill Wylie. One important fact which is brought out in Dr. Delbet's experiment is this, that after flushing the peritoneum for ten minutes with the saline solution, a poisonous fluid may be diffused over the peritoneum with impunity, provided that it be followed by another flushing with the saline water.

I have washed out the peritoneum in more than one-half of the last hundred cases in the table, and I have never seen anything approaching the condition described by Dr. Polaillon. In many of these the abdomen has been completely filled. I cannot but believe that if Dr. Polaillon had used plain water instead of a weak solution of carbolic acid, he probably would not have met with such a disaster in the case in question, nor

the serious symptoms he observed in two others. It is probable that a weak solution of carbolic acid might be absorbed by the peritoneum in considerable quantity, while a stronger solution, by virtue of its caustic and coagulating property, would have the effect of closing the mouths of the lymphatics, and thus limiting the absorption. It is too late to deny the possibility of the absorption of carbolic acid by the peritoneum. There are too many observations on record to prove the fact beyond any doubt. We know also that as in the case of corrosive sublimate or any mercurial preparation, some persons are peculiarly sensitive to its action, and that while in a large majority of cases no harm may accrue, yet now and then a case is met with in which this idiosyncrasy exists. This is the only rational way of accounting for the large number of deaths due to the use of carbolic acid, and more especially corrosive sublimate. I protest, then, against the employment of any so-called germicide substance in flushing the peritoneum, and cannot too strongly insist on confining ourselves to plain water as at once perfectly innocuous, and thoroughly efficient. If, however, it should be any comfort to the operator's peace of mind to use *something*, let him limit himself to the use of that innocent, and in certain circumstances—as for instance great loss of blood—possibly beneficent, substance, known under the name of common salt.

(2) *The Treatment of the Pedicle.*—More than seventeen years ago I exhibited a specimen before the Obstetrical Society of London, which illustrated the changes which take place in the pedicle of an ovarian tumour—and it applies to all pedicles—after the application of the ligature (*Obstet. Trans.*, January, 1872), and the explanation I then gave of this process is now universally accepted as the correct one. But it is rare to find the credit assigned to the right person. At that time, and for several years after, the clamp was almost universally used. In the beginning of the year 1876, dissatisfied with the clamp, and on the faith of the observation just referred to, I announced my intention of exclusively employing the ligature until I

had settled the question to my own satisfaction. Since the 25th of November, 1875, I have used it exclusively, and I have now the satisfaction of witnessing its almost universal adoption. (I appeal to the writings of Mr. Lawson Tait for an expression of opinion as to the beneficial results of the change.) I soon, however, found that there were difficulties in the way, for I lost my nineteenth case from the slipping of the outer edge of the pedicle—that edge which consists of two folds of peritoneum with its contained vessels. To obviate this source of danger I adopted the plan of first securing this fold by a separate ligature before transfixing for the main ligatures. This plan has never failed me, but its omission has more than once led me into disaster. It has been suggested that the object to be attained was the securing of the blood vessels. To a certain extent that is true, but that result is attained indirectly, for it has never been shown that the vessels have retracted while the folds of the peritoneum remained encircled by the ligature. Nor can it be. When the peritoneum of this part of the broad ligament is folded upon itself, as must happen in the case of a broad thin pedicle, it is remarkable with what ease one of the folds can be pulled through the loop, even when the ligature is tied as tightly as possible. It was this fact that suggested the method to me. Then again, it was suggested that the ligature should not be tied as tight as possible in order to allow of capillary circulation through the constricting loop. This suggestion would seem to have been made in ignorance of the fact that in all cases there is more or less shrinking of the tissues embraced by the loop after the tumour has been cut away. This fact is particularly seen when uterine tissue is dealt with, and constitutes the principal objection to the use of the ligature in such cases. In a large number of cases it is sufficient to transfix the pedicle, and tie with all the force the ligature will bear, using either the double ligature, the Staffordshire knot, or the figure-of-eight knot, according to the predilection of the operator. But it very frequently happens that the pedicle is so large, so thick,

and so vascular that more than the double ligature is required for the main constriction. I have put on as many as nine ligatures in such a case as this. For such a pedicle as this I devised the method of first compressing the pedicle by means of a pair of powerful forceps, or even two pairs. By such means the thickness of the pedicle is reduced to one-half, or even one-third of the size it would have retained under the old method, and two loops will now be sufficient instead of the three, four or five, or more ligatures formerly required. There is this further advantage that there can be no appreciable shrinking of the tissues after the application of the ligatures, while the pedicle being divided through uncompressed tissue a knob is left outside as an additional safeguard against slipping of the pedicle. For my part, I prefer the figure-of-eight loop, but this is a matter of predilection.

(3) *Opium*.—When I began to perform ovariectomy, and for many years after, I followed the routine practice of administering some preparation of opium, either by the rectum or by subcutaneous injection. The rule was to administer the sedative as soon as the patient had recovered sufficiently from the anæsthetic to complain of pain, and I believe it remains the rule with the majority to the present day. So much are we the slaves of custom that we continue the practice simply because our great-grandfathers did it. Probably most men who give a sedative now-a-days can give no better reason for so doing than I could give five years ago.

It was about the same time that I resorted to flushing the peritoneum that I discontinued the use of opium after operation. It came about in this way. Early in the year, 1884, I performed ovariectomy on an old woman æt. 58, and to arrest the very free bleeding from the parietes I resorted to ligatures and the actual cautery. The case was a very severe one and complicated with a chronic cough. Although she was very ill on the fourth day, yet her pulse and temperature indicated that she might last another day. She had had morphia—a quarter grain—immediately after the operation, according to the usual routine, and at intervals afterwards. I had no hope

of saving her, and as she was complaining of pain at my visit I wished to spare her any avoidable suffering, and gave her a sixth of a grain of morphia subcutaneously. She was dead within ten minutes. I was horrified and said to the nurse, "We must not have this happen again. For the future give only a sixth of a grain after the operation and don't repeat it if you can avoid it." By and by I reduced the dose to an eighth, and, satisfied with the result in several cases, I afterwards reduced it to a twelfth. It was observed that there was less sickness and less discomfort generally the next day, and the tongue was more moist. Then I said, "Now we'll leave it off altogether." It was some months ere we get to the end of our experiment, but so satisfactory were the results that since the beginning of 1885 no opium has been administered after *any* operation with three exceptions. In one of these 20 minims of laudanum were administered once by the rectum, in the second a quarter of a grain of morphia was injected into the arm, and in the third an eighth.

It is at least a curious coincidence, if not a consequence, that my mortality since that time is under 4 per cent., as may be seen by the table. Not only have the patients recovered in larger numbers but they have also recovered better. Any one who has experienced the after-effects of opium as I have done, especially the distressing restlessness, will be only too ready to spare his patients such suffering. Now if there is one operation more than another which would seem to demand the administration of a sedative it is that of supra-vaginal hysterectomy, in which the pedicle is treated extra peritoneally with the *serre-nœud* or elastic ligature. In that operation the pain is undoubtedly severe, at least for a few hours. But it is only necessary to encourage the patient to bear the pain as courageously as possible with the assurance that in a few hours she will be in comfort. I find no difficulty in persuading her to this, not even for the purpose of allaying restlessness, for the relief of which Dr. Greig Smith still recommends it.

It is an admitted fact that opium is a virulent poison in

most cases of chronic Bright's disease, and yet although my table contains several cases where there was a strong suspicion of such disease, the patients have done well.

In a paper on "The Condition and Management of the Intestine after Abdominal Section," Mr. Malcolm pleads strongly in favour of the administration of opium after operation, on the ground that "to keep the whole intestine as quiet as possible for a time would seem to be one of the plainest indications. Opium is our best agent for this purpose. Opium quiets the action of the gut, secures as much as possible the intestinal rest which is so greatly needed, and tends to prevent those irregular, fruitless and exhausting efforts which are so exhausting at this time." While, however, he admits that "opium may undoubtedly do harm in some cases and conditions," he contends that "there is abundant evidence of its beneficent action." Now this is just the point that I contest. It is certainly of the first importance to quiet "the action of the gut" after abdominal section, especially in severe operations in which there may have been "much interference with the bowel and mesentery, and laceration of these parts in the separation of adhesions," but this is better effected by giving the intestines nothing to do for twenty-four or more hours, and keeping up gentle elastic pressure, or rather support, than by giving opium and binding down the intestines by strips of adhesive plaster applied firmly over heavy and hard dressings as he has learnt to do. It would be vain to deny that opium diminishes the peristaltic action of the intestines. But it does more, it diminishes secretion. Why does a woman who has lost control over the rectum, through complete destruction of her perineum and sphincter, so often resort to the use of opium to enable her to move about without great inconvenience and discomfort? It is because of this double effect. Both these effects are interferences with the normal and healthy action of the intestine, and as such are not desirable. But I will not pursue the argument further. I will content myself with expressing the hope that surgeons will cast aside the pernicious

trammels of routine practice and put the matter to the test. I can confidently assure them that if they will do so—as Mr. Lawson Tait and myself have long ago done—they will have no cause for regret. It was gratifying to me to hear one of our secretaries announcing, at a recent meeting, that he had found it answer well. I trust his example will be extensively followed.

(4) *General after Treatment: (a) Vomiting.*—When I first began to have the management of cases of ovariotomy and to perform the operation, and even for several years afterwards, I used to try to stop sickness by the administration of prussic acid and other antispasmodics, and I am sure I often did harm thereby. It is now a long time since I came to the conclusion that the best way of arresting sickness was to keep the stomach as quiet as possible by preventing anything from getting into it. This is provided for in the first instance by not allowing any food to be taken for many hours before the operation. Hence I prefer operating in the morning, the last food taken being a light supper. Sometimes, however, the stomach will be found to contain some watery mucus in quantity so small that the efforts to get rid of it by vomiting are quite ineffectual. A few ounces of hot water will generally suffice to clear out the stomach, and there is no more trouble. At others bile is excreted in large quantity and gains access to the stomach. When the bile is yellow and thus gives indications of its recent entrance into the stomach, the hot water alone will probably suffice to get rid of it at once. But when its conversion to a green colour shows that it has been long enough in the stomach to be decomposed by its acid contents something more is required. The best remedy in my experience is the administration of three or four ounces of hot water containing fifteen or twenty grains of bicarbonate of soda. It is very rare, however, that I am called upon to resort to these measures, although all my patients are anæsthetised with chloroform, which in the opinion of some is so objectionable, but which I may here state is, in my opinion, and after an experience of thirty years, the best anæsthetic we possess.

(b) *Thirst*.—It would appear to be still a very prevalent practice to allow patients to suck ice for the purpose of allaying thirst. I would recommend the study of the literature of Arctic exploration to any one who has any doubt on this subject. He will there find unprejudiced evidence, sufficient to convince the most obstinate, of the injurious effects of this practice. Indeed, the strongest warning is given against the slightest indulgence in it, for it is so seductive in its immediate effects. Nothing gives so much relief as rinsing the mouth with warm water. Why is it that a cup of tea is so much more lasting in its refreshing effects in hot weather than a cold drink? It is because of its warmth, and the consequent absence of reaction. It seems to me so long since I gave up the practice of giving ice that my memory does not enable me to assign a date to it. Yet the practice is still so prevalent that I very seldom come across a fresh nurse without having to give her specific instructions on this point.

Peritonitis is one of the most serious conditions we have to encounter in the after treatment of a case of ovariectomy. While it was at one time a very common condition and perhaps the most frequent cause of death, I am happy to say that for several years I have had very little experience of it. In this I consider myself very fortunate, for I must confess that I have little or no faith in any kind of treatment. Lawson Tait and Greig Smith tell us that they are in the habit of meeting the first symptoms of peritonitis by the administration of a saline purgative. I have no experience of this method of treatment, and I fail to understand the *rationale* of it. Now peritonitis may arise from causes operating within the peritoneal cavity, or outside it. I need not enumerate the various causes of the former, the chief of which has been obviated so largely by the use of the drainage tube. The latter is due to the presence of irritating matters in the digestive tract. In the former class of cases I believe we are helpless, unless we can remove the offending material from the peritoneal cavity. This can only be done by re-opening the

peritoneum, and the treatment must be surgical. In the latter, however, our resource must be found in the medical art as distinguished from the surgical. Now, in my experience, one of the first, if not the first, symptom of peritonitis is vomiting. But every case of vomiting is not one of peritonitis, even when occurring several days after the operation. Nor is tympanites a sure and certain sign of peritonitis. It is particularly a sign of obstruction, whether from paralysis or mechanical obstruction of intestine from any cause. The following case illustrates what I mean. Some years ago a patient of mine was seized with sickness several days after the operation of supra-vaginal hysterectomy. The vomited matter went through the various changes until it assumed that appearance which so often indicates a fatal termination, viz., black vomit. All food had been stopped by the mouth without any benefit, and beef tea enemata had been substituted. Happening to pay a visit when the beef tea injection was due, I inquired if anything had come away, when the rectal tube was passed as a preliminary. There was undoubtedly some fæcal matter in the refuse. I had a large enema at once administered. It brought away a considerable quantity of fæcal matter, and it was not till eleven or twelve enemas were given that I was satisfied that all the accumulation had been removed. The vomiting ceased as if by magic, and did not return, and there was no further trouble. I have my own opinion as to what would have been the probable result had I given an aperient, saline or anything else, instead of the injections.

In such a condition as that indicated by Tait and Smith, I have adopted an opposite course—and I have had a considerable number of such cases—in stopping everything by the mouth, and the results have been most satisfactory. In my experience purgatives have always aggravated the condition. Greig Smith tells us that he believes “that a saline purge may be of advantage where there is fluid collecting in the pelvis.” I am glad he finds comfort in the belief. Moreover he says—though I have not been able to verify the

quotation—that Tait tells us that in many cases where others would drain, he purges. But that is a very different thing, and reminds me of the abortive treatment of fevers by an emetic. You cannot possibly prove your case. On the whole, then, while fully accepting the statements of Tait and Smith as statements of fact, I am not prepared to accept their interpretation of those facts, and I believe we are as far as ever from the attainment of a successful method of treating actual peritonitis.

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
163	Dr. Spooner, Blandford	20	S.	.....	...	1881 April 27	Omental	1
164	Dr. Gage Brown, Sloane Street	51	M.	7	...	April 30	None, but enucleation from broad ligament	2
165	Dr. Steele, Babbacombe, Torquay	27	M.	2	15	May 14	Parietal, omental, pelvic, many ligatures	3
166	Mr. W. Adams, Regent's Park	51	S.	.....	...	June 4	Omental, intestinal, pelvic, many ligatures	4
167	Mr. Winterbotham, Bridgwater	38	M.	4	...	June 9	None	5
168	Dr. Tyacke, Chichester	47	M.	8	7	June 15	Extensive parietal	6
169	Dr. W. Lowe, Burton-on-Trent	45	M.	8	...	June 25	Old parietal, 6 ligatures	7
170	"General Hospital," London	58	M.	3	...	July 2	Omental, epiploic	8
171	Mr. Marley, Padstow...	33	M.	.....	...	July 6	Extensive old parietal, many lig.	9
172	Dr. Pope, Malling	26	M.	Twins	...	July 19	None	10
173	Mr. W. G. Johnson, Bedford	22	S.	.....	...	July 26	None	11
174	Dr. Routh	55	S.	.....	...	Aug. 4	Right enucleated from broad ligament, papilloma, many ligatures	12
175	Mr. Lings, Wivenhoe...	49	M.	3	...	Aug. 4	Old parietal, epiploic, many lig.	13
176	Mr. Bowes, Herne Bay	67	M.	.....	4	Oct. 5	Extensive old parietal	14
177	Mr. Van, Cranborne ...	34	M.	6	...	Oct. 6	None	15
178	Dr. Wynn Williams ...	59	S.	.....	...	Oct. 12	None	16
179	Mr. Dingley	23	S.	.....	...	Oct. 12	Slight omental	17
180	Dr. Mills, Norwich ...	44	M.	.....	...	Oct. 13	Omental, pelvic	18
181	Mr. J. Worthington, Lowestoft	24	M.	2	3	Oct. 19	Parietal, omental	19
182	Mr. Todd, Mount Place,	41	M.	10	...	Oct. 26	Parietal, omental, 7 ligatures ...	20
183	Dr. Rooke, Cheltenham	16	S.	.....	...	Oct. 27	None	21
184	Dr. Granville Bantock	33	S.	.....	1	Nov. 7	Parietal, omental, pelvic, intestinal and sigmoid flexure	22
185	Dr. Wynn Williams ...	39	M.	7	...	Nov. 15	Parietal, omental, 5 ligatures ...	23
186	Mr. G. A. Davies, Newport, Monmouthshire	32	S.	.....	...	Nov. 23	None	24
187	Out-Patient Department	41	S.	.....	...	Nov. 29	Parietal, omental	25
188	Dr. Matheson	31	S.	.....	...	Dec. 9	None	26
189	Dr. Coombs, Castle Cary	55	S.	1	...	Dec. 15	Parietal.....	27
190	Dr. Mitchell	26	S.	.....	...	Dec. 21	Parietal, epiploic, recent, very vascular	28
191	Mr. Goodridge, Paignton	41	S.	.....	...	1882 Jan. 11	Close attachment of last few inches of ileum	29
192	Mr. Johnston, Maidstone	44	M.	10	...	Mar. 23	None	30
193	Mr. W. G. Johnson, Bedford	24	S.	.....	...	Mar. 29	None	31
194	Dr. McLean, Portland	37	M.	1	1	Mar. 31	Extensive parietal, omental, intestinal, many ligatures	32

	Pedicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
			min.				
1	{ L. Lig. 2 & c. R. " "	38 lbs. 200 grs.	55	.....	D. 14 hrs.	Secondary hæ- morrhage	Slipping of outer edge of pedicle L.
2	L. Lig. 6	8½ lbs.	65	.....		
3	L. Lig. 2 c. ...	46 lbs.	135	10 hrs.	D. 10 hrs.	Shock	Great emaciation. Patient never rallied
4	L. Lig. 2 c. ...	5½ lbs.	130	9½ hrs.	D. 9½ hrs.	Shock	Large umbilical hernia, with adherent omentum
5	R. Lig. 2 c. & I	19½ lbs.	30	.....	R.	.....	Parovarian
6	R. Lig. 2 c. I...	21 lbs.	30	.....	R.	.....	Parovarian
7	{ R. Lig. 2 c. I L. Lig. 2 c. c.	40 lbs.	65	.....	R.	.....
8	L. Lig. 2 c. I...	22 lbs.	45	.....	R.	.....	Very short pedicle
9	R. Lig. 2 c. I...	42 lbs.	90	46 hrs.	R.	.....
10	R. Lig. 2 c. I...	21 lbs.	30	.....	R.	.....	Parovarian
11	R. Lig. 2 c. I...	16 lbs.	35	.....	R.	.....	Parovarian
12	{ L. Serre-nœud to uterus R. Enucleation	10 lbs. 1 lb.	120	24 hrs.	R.	.....	Double ovariectomy and hys- terectomy
13	L. Lig. 1.....	16 lbs.	65	.....	R.	.....
14	R. Lig. 2 c. I...	29 lbs.	45	.....	R.	.....	Hæmorrhage into largest cyst
15	L. Lig. 2 c. I...	4½ lbs.	30	.....	R.	.....	Erythema at time of operation
16	L. Lig. 2 c. I...	6 lbs.	30	.....	R.	.....	Ruptured cyst, much fluid in peritoneum
17	L. Lig. 2 c. I...	16 lbs.	35	.....	R.	.....
18	L. Lig. 5.....	22 lbs.	90	.....	D. 5th day	Slight second- ary hæmorrhage and septicæmia	Abdomen opened 5th day. Effused blood became septic
19	L. Lig. 2 c. 2...	22 lbs.	70	53 hrs.	R.	.....	February 3, 1883, delivered of a boy
20	R. Lig. 2 c. I...	32 lbs.	65	41 hrs.	R.	.....	Omentum caught in drainage tube
21	L. Lig. 2 c. I...	7 lbs.	35	.....	R.	.....
22	L. Lig. 2 c. c...	4 lbs.	50	37 hrs.	R.	.....	Recent inflammation of cyst
23	R. Lig. 2 c. I...	19 lbs.	35	.....	R.	.....
24	{ L. Lig. 2 c. ... R. Lig. 2 c. ...	19 lbs. 240 grs.	30	.....	D. 6th day	Acute general peritonitis	Abdomen opened & drained 5th day
25	{ L. Lig. 2 c. I R. Lig. 2 c. I	11 lbs.	75	24 hrs.	D. 6th day	Suppuration in pelvis	Drainage tube removed too soon
26	{ L. Lig. 2 c. ... R. Lig. 2 c. ...	1 lb. ¾ lb.	60	.....	R.	.....	Papilloma of both ovaries
27	L. Lig. 2 c. I...	16 lbs.	25	.....	R.	.....
28	L. Lig. 2 c. ...	21 lbs.	50	3½ days	D. 7th day	Obstruction of ileum	Abdomen opened 7th day and obstruction removed
29	R. Lig. 2 c.	17 lbs.	40	.....	D. 5th day	Obstruction of intestine	Last 6 ins. of ileum collapsed, adherent to stump of pedicle
30	{ L. Lig. 2 c. I R. Lig. 2 c. ...	12 lbs. 4 ozs.	50	.....	R.	.....
31	L. Lig. 2 c. I...	11 lbs.	25	.....	R.	.....
32	{ L. Lig. 2 c. I R. Lig. 2 c. ...	16 lbs.	75	106 hrs.	R.	.....

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
						1882		
195	Mr. Haines, Lower Norwood	30	M.	.....	...	May 10	Parietal, omental, recent and very vascular	1
196	Dr. Seton, Thurloe Place	28	S.	.....	...	May 13	None.....	2
197	.....	41	S.	.....	...	June 3	None.....	3
198	Mr. Carter, Bedford ...	38	M.	5	...	June 17	Omental, 5 ligatures	4
199	Dr. Kebbler, Hackney	38	M.	6	...	June 24	Enucleation	5
200	Dr. Platt, Kilburn	50	S.	.....	...	July 5	Enucleation of base	6
201	Dr. Cronin, Clapham Common	42	S.	.....	...	July 14	None.....	7
202	Out-patient Department	46	S.	.....	1	July 19	Parietal, omental, intestinal, vesical, pelvic, many ligatures	8
203	Dr. Job, Newark.....	33	M.	5	...	July 22	None.....	9
204	Mr. Dunn, Crech.....	53	M.	.....	...	July 27	None.....	10
205	Dr. Mackintosh, Brompton Road	30	M.	.....	...	Oct. 4	To cæcum, many ligatures	11
206	Dr. Steele, Articlave Dispensary, Ireland	41	S.	.....	...	Oct. 4	R. omental & enveloped in broad ligament. L. filamentous adhesions	12
207	Mr. Thomas, Market Bosworth	55	M.	4	...	Oct. 12	Parietal, omental, many ligatures	13
208	Dr. Barnes, Erith.....	48	M.	12	...	Oct. 19	Parietal, omental, many ligatures	14
209	Dr. Sheldon, Cornwall Road	51	M.	6	...	Oct. 19	Very extensive parietal, omental and intestinal, many ligatures	15
210	Dr. Routh	25	S.	.....	...	Oct. 25	Enucleation of right, left to broad ligament	16
211	Dr. Lloyd Brown, Islington	66	M.	8	...	Oct. 25	Extensive omental, many ligatures	17
212	Dr. Seton, Thurloe Place	40	M.	3	...	Nov. 1	Omental, slight, 1 ligature	18
213	Out-patient Department	57	W.	4	...	Nov. 6	None.....	19
214	Dr. Watson, Newbury	57	W.	5	..	Nov. 22	None.....	20
215	Dr. Poole, Sidcup	32	M.	6	...	Dec. 2	Universal—parietal, omental, vesical, &c.	21
216	Dr. Taylor, Trowbridge	32	W.	2	...	Dec. 6	None.....	22
217	Gt. Northern Hospital	46	W.	.....	4	Dec. 9	Parietal, omental, &c. Enucleation	23
218	Dr. Elliott, Tunbridge Wells	62	S.	.....	...	Dec. 13	Old parietal, many ligatures, also to cæcum	24
219	Dr. J. Henry Philpot...	62	M.	.....	...	1883 Jan. 3	Extensive, parietal, several ligatures, omental, 2 ligatures	25
220	Dr. Amand Routh	37	S.	.....	...	Jan. 17	Universal omental, intestinal, pelvic	26
221	Dr. Pope, Malling	30	S.	.....	...	Jan. 24	None.....	27
222	Dr. Granville Bantock	41	S.	.....	...	Jan. 25	Parietal, recent and very vascular	28
223	Mr. Garman, Bow Road	52	W.	5	...	Feb. 2	None.....	29
224	Dr. Wynn Williams ...	33	M.	.....	...	Feb. 14	Pelvic of left	30

	Pedicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
			min.				
1	{ L. Lig. 2 c....	29 lbs.	55	.....	D.	Peritonitis	Recent inflammation of tumour, acute peritonitis
2	{ R. Lig. 2 c....	13 lbs.	30	.....	R.	.....	Left ovary looked unhealthy
3	L. Lig. 2 c. 1	15 lbs.	40	.....	R.	.....	Very multilocular, incision 7 to 8 inches
4	L. Lig. 3 c. ...	14½ lbs.	50	.....	R.		
5	{ R. Lig. 3.....	47½ lbs.	80	68 hrs.	R.		
6	{ L. Lig. 2 c....	23 lbs.	45	.....	R.		
7	L. Lig. 8.....	27½ lbs.	25	.....	R.		
8	{ L. Lig. 9 ...	13½ lbs.	120	3 dys.	R.	.....	Left suppurating. Right hæmorrhagic.
9	{ R. Lig. 3 ...	1 lb.	30	.....	R.		
10	{ L. Lig. 2 c. 1	8 lbs.	30	.....	R.		
11	{ R. Lig. 2.....	2 lbs.	75	4 dys.	R.	.....	Ruptured cyst. Since pregnant
12	L. Lig. 2 c. 1...	28 lbs.	30	.....	R.		Right enucleated entirely
13	R. Lig. 2.....	17 lbs.	75	4 dys.	R.	.....	Pedicle quite secure
14	{ R. Lig. 10 to 12	20 lbs.	90	.....	D.	Obstructed intestines	
15	{ L. Staffs. knot	12 oz.	35	.....	D.	Hæmorrhage apparently omental	
16	L. Fig. 8 Lig....	25 lbs.	35	.....	D.		
17	R. Fig. 8 c. 1	20 lbs.	35	.....	R.		
18	L. Fig. 8 c. 1	22 lbs.	80	4½ dys.	R.		
19	{ L. Enucleation	8 lbs.	105	4 wks.	R.	.....	Both parovarian, right hydro-salpinx also, drained envelope of large cyst, which dipped down to level of os uteri. Mens. returned.
20	{ R. Lig. 5.....	1 lb.	50	.....	R.		
21	L. Fig. 8 c.....	8 lbs.	35	.....	R.	.....	Left ovary in early stage of cystic degeneration
22	{ L. Fig. 8 c. 1	9 lbs.	45	.....	R.		
23	{ R. Fig. 8 c....	120 grs.	35	.....	R.		
24	{ R. Fig. 8 c....	28½ lbs.	35	120 hrs.	R.	.....	Ruptured cyst, hæmorrhage into unruptured cyst
25	{ L. Fig. 8 c....	½ lb.	90	6 dys.	R.	.....	Twisted pedicle, R. hæmorrhage, high temp. before operation
26	L. Fig. 8 c. ...	17½ lbs.	30	.....	R.	.....	Dermoid
27	{ R. Fig. 8 c....	5 lbs.	100	4 dys.	R.	.....	Suppurating cyst
28	{ L. Fig. 8 c....	300 grs.	35	.....	R.	.....	Adhesions unusually firm
29	R. Fig. 8 c.....	2 lbs.	60	.....	R.	.....	Very troublesome oozing from parietes
30	R. Enucleation.	11 lbs.	65	5½ dys.	R.	.....	Dermoid, twisted pedicle
31	5 ligs.	10½ lbs.	25	.....	R.	.....	Parovarian
32	R. Fig. 8 c. ...	14 lbs.	50	4½ dys.	R.	.....
33	{ R. Fig. 8 c. 1	10½ lbs.	20	.....	R.	.....
34	{ L. Fig. 8.....	180 grs.	70	.....	R.	.....	Double hydro-salpinx also
35	R. Fig. 8 c. ...	5½ lbs.	20	.....	R.	.....
36	{ L. Fig. 2 c....	1 lb.	25	.....	R.	.....
37	{ R. Fig. 8 c....	¾ lb.	25	.....	R.	.....

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
						1883		
225	Dr. Cronin, Clapham Common	31	M.	7	...	Feb. 17	Universal—parietal, omental, intestinal, many ligatures	1
226	Dr. Hope, Petworth ...	36	M.	4	...	Feb. 28	Omental	2
227	Dr. O'Mullane, Nottingham	44	M.	4	...	Mar. 13	Omental	3
228	Dr. Wynn Williams ...	32	S.	.....	...	Mar. 14	Colon attached to pedicle, detached and ligatured	4
229	Dr. Granville Bantock	46	S.	.....	...	Mar. 20	Omental, 5 ligatures, filamentous bands in pelvis	5
230	Mr. Cheadle, Burford...	40	M.	5	1	Mar. 28	None	6
231	Mr. Palmer, Nayland...	51	M.	8	...	Apr. 19	Parietal.....	7
232	Dr. Potter, Cullompton	54	M.	.....	...	May 2	Extensive parietal	8
233	Dr. Carey, Taunton ...	32	S.	.....	...	June 6	None	9
234	Dr. Haining, Chester...	47	S.	.....	1	June 13	Omental, 5 ligatures, parietal, 1 ligature	10
235	Mr. Haywood	44	M.	7	...	July —	Broad attachment to uterus and broad ligament	11
236	Dr. Studdert, Erith ...	25	M.	2	...	July 18	None	12
237	Dr. Reynaud, Manchester	42	S.	.....	...	July 25	None	13
238	Dr. Herbert Snow	38	M.	7	...	Oct. 30	Universal—parietal, omental, intestinal, pelvic, many ligatures	14
239	Dr. Granville Bantock	62	M.	3	...	Nov. 7	R. pelvic	15
240	Dr. Granville Bantock	52	M.	5	...	Nov. 13	Intestinal	16
241	Dr. Humphries, Lymington	50	M.	4	...	Nov. 17	Omental, 2 ligatures	17
242	Dr. Herbert Snow	22	S.	.....	...	Nov. 28	Omental	18
243	Dr. Stewart, Nottingham	44	M.	.....	...	Dec. 4	Pelvic	19
244	Mr. Curgenven	21	M.	.....	...	Dec. 11	None	20
245	Mr. Copestake, Derby	20	S.	.....	...	Dec. 12	None	21
246	Dr. Hope, Chobham ...	41	M.	.....	...	Dec. 19	None	22
247	Surg.-Major Pringle ...	30	M.	2	...	Dec. 22	None	23
						1884		
248	Mr. Fowler, Cirencester	69	M.	3	4	Jan. 16	Very extensive parietal, omental, 6 ligatures	24
249	Dr. Jenkin, Eltham ...	60	S.	.....	...	Mar. 1	Extensive parietal and omental, several ligatures	25
250	Mr. Dingley.....	28	M.	2	...	Mar. 12	Extensive omental, many ligatures	26
251	Dr. Wynn Williams ...	25	M.	.....	...	Mar. 26	None	27
252	Dr. Trollope, St. Leonards	37	M.	8	...	Apr. 3	Omental	28
253	Dr. Smith, Mile End Road	46	M.	6	...	Apr. 5	Extensive parietal, cautery	29
254	Dr. Woodman, Exeter	30	S.	.....	1	Apr. 23	Extensive parietal, cautery	30
255	Dr. Stewart, Nottingham	29	M.	1	...	May 7	None	31
256	Mr. Tivy, Clifton	58	M.	6	1	May 14	Extensive parietal, ligatures and cautery	32

	Pecicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
1	L. Fig. 8.....	19 lbs.	95 min.	27 hrs.	D.	Suppression of urine	Suppuration of cyst, offensive; kidneys large, pale, fatty
2	L. Fig. 8 c. I...	17 lbs.	30	.....	R.		
3	{ L. Fig. 8 c. ...	12½ lbs.	35	.....	R.		
4	{ R. Fig. 8 c. ...						
5	L. Lig. 3 c. I...	8 lbs.	55	.....	R.	.....	Dermoid, very solid
6	R. Fig. 8 c. c. I	13 lbs.	45	.....	R.		
7	{ L. Fig. 8 c. ...	33½ lbs.	35	37 hrs.	D.	Acute suppression of urine	Ruptured colloid, fatty kidneys
8	{ R. Fig. 8 c. ...				R.		
9	L. Fig. 8 c. ...	12½ lbs.	30	.....	R.		R. small parovarian
10	{ L. Fig. 8 c. ...	18 lbs.	40	.....	R.		
11	{ R. Lig. 2.....	½ lb.					
12	L. Lig. 2 c. I...	5 lbs.	35	.....	R.		Phlebitis a few weeks before
13	L. Fig. 8 c. I...	21 lbs.	55	.....	R.		Pus in urine and some albumen
14	Enucleation ...	14 lbs.	30	.....	R.		
15	{ R. Fig. 8 c. I.	8 lbs.	40	.....	R.		Seized with vomiting on day she was to leave hospital, and died of acute enteritis 2 days after—28th day
16	{ L. ...	1 lb.					
17	L. Fig. 8 c. ...	17½ lbs.	30	.....	D.	Acute peritonitis	Acute peritonitis at time of operation
18	{ L. Fig. 8 c. ...	12 lbs.	130	98 hrs.	R.		
19	{ R. Lig. 2.....	2 lbs.					
20	{ L. Lig. 4.....	15½ lbs.	55	.....	R.		
21	{ R. Fig. 8 c. ...	2 lbs.					
22	{ R. Lig. 6.....	31 lbs.	100	102 hrs.	R.		Ruptured colloid
23	{ L. Fig. 8 c. ...	2 lbs.					
24	R. Fig. 8 c. ...	24 lbs.	30	.....	R.		
25	{ R. Fig. 8 c. ...	10 lbs.	40	.....	R.		R. dermoid ruptured about 3 months
26	{ L. Fig. 8 c. ...	7 lbs.	30	.....	R.		
27	R. Fig. 8 c. ...	28 lbs.	40	7 days	R.		Ruptured, thin colloid
28	L. Fig. 8 c. I...	25 lbs.	50	.....	R.		Parovarian
29	L. Fig. 8 c. I...	3 lbs.	40	.....	R.		Pregnant, 1886
30	R. Fig. 8 c. ...	13½ lbs.	20	.....	R.		Hæmorrhage into cyst, patient came from India
31	L. Fig. 8 c. ...	22 lbs.	55	90 hrs.	R.		
32	R. Lig. 6.....	25 lbs.	75	7 days	R.		Very short, broad pedicle
33	L. Fig. 8 c. ...	2 lbs.	40	.....	R.		
34	R. Fig. 8 c. I...	9 lbs.	20	.....	R.		
35	L. Fig. 8 c. I...	16 lbs.	50	.....	R.		
36	{ R. Fig. 8 c. I.	40 lbs.	85	6 days	R.		18 oz. blood and serum from tube
37	{ L. ...						
38	R. Fig. 8 c. ...	22 lbs.	75	.....	R.		
39	{ R. Fig. 8 c. ...	10 lbs.	70	.....	R.		Rupture of larger tumour
40	{ L. Fig. 8 c. ...	7 lbs.					
41	R. Fig. 8 c. ...	33 lbs.	120	3½ dys.	D.	Peritonitis	Recent acute peritonitis
42					4th dy.		

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
257	Dr. Bridger, St. Peter's Park	42	M.	5	...	1884 May 16	Universal—parietal, omental, intestinal, uterine, vesical, many ligatures	1
258	Mr. Corbett, Kingston-on-Thames	61	M.	8	...	June 4	None.....	2
259	Dr. Titley, Brigg	45	M.	1	...	June 11	Parietal.....	3
260	Mr. Wynn Williams, Brixton Hill	32	M.	.....	1	June 28	None.....	4
261	Dr. Crofts, Nottingham	30	M.	3	...	July 18	None.....	5
262	Mr. Robinson, Bedford	42	M.	.....	...	Sept. 27	Pelvic, uterine.....	6
263	Mr. Hicks, Ramsgate...	49	W.	.....	...	Oct. 2	Extensive parietal	7
264	Dr. Amand Routh	22	S.	1	...	Oct. 20	None.....	8
265	Dr. Morton, Aylsham	38	M.	7	...	Oct. 22	Extensive old parietal, cautery ...	9
266	Dr. Rae, Devonport ...	33	M.	3	...	Oct. 26	Omental, intestinal, mesenteric	10
267	Dr. Amand Routh	42	M.	5	...	Nov. 6	R. free, L. omental	11
268	Mr. Ferguson, Richmond	39	M.	2	...	Nov. 13	Pelvic—to uterus and broad ligament, partial enucleation	12
269	Dr. McCarthy, Darlington	23	S.	.....	...	Nov. 19	.....	13
270	Dr. McLean, Portland	52	M.	.....	...	Nov. 29	Universal parietal, ligatures and cautery	14
271	C. Coates, F.R.C.P., Bath	46	M.	6	...	Dec. 6	Extensive parietal	15
272	Dr. Adams, Martock ...	64	W.	.....	...	Dec. 17	None, but very broad pedicle, partial enucleation	16
273	Mr. Cresswell, Dowlais	55	W.	1	...	Dec. 20 1885	None	17
274	Dr. Lord, Notting Hill	26	M.	1	...	Jan. 7	Omental to twisted pedicle of R.	18
275	Mr. T. W. Nunn	36	M.	.....	...	Jan. 12	None	19
276	Dr. Hutchison, Chip-ping Norton	47	M.	.....	...	Feb. 13	Enucleation, over 20 ligatures ...	20
277	Dr. Mackie, Nottingham	22	M.	1A	...	Feb. 14	Parietal, omental, 7 or 8 ligatures	21
278	Dr. Gage Brown, Sloane Street	25	M.	2	1	Feb. 20	Extensive parietal and omental, many ligatures	22
279	Dr. Rae, Devonport ...	32	M.	2	...	Feb. 21	Extensive parietal and omental, many ligatures	23
280	Mr. Webb, Maida Vale	32	M.	.....	...	Mar. 10	Pelvic and intestinal	24
281	Mr. Littleton, Ashbourne	27	M.	.....	1	Mar. 16	Parietal, pelvic	25
282	Dr. Smith, Clapton Sq.	56	W.	7	1	April 1	Parietal, intestinal (2 feet) mesenteric, many ligatures, cautery to parietes	26

	Pedicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
			min.				
1	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	5 lbs 1 oz.	90	125 hrs.	R.	.....	Twisted pedicle with intracystic hæmorrhage. R. parotitis 9th day
2	L. Fig. 8 c.	5½ lbs.	30	.....	R.	.....	Disseminated cancer of peritoneum
3	L. Lig. 5.	16 lbs.	80	94 hrs.	R.	.....	Ruptured colloid, deposit of colloid in walls of stomach, colon, &c.
4	{ R. Fig. 8. c. I L. Lig. 2 c. ...	14½ lbs. ½ oz.	35	.....	R.	.....
5	R. Fig. 8 c. ...	7½ lbs.	25	.....	R.	.....
6	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	9 lbs. ½ oz.	55	.....	R.	.....
7	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	10 lbs. 9 oz.	35	.....	R.	.....
8	{ L. Fig. 8 c. I R. Fig. 8 c. I	8 lbs. 1½ ozs.	35	.....	R.	.....
9	{ L. Fig. 8 c. I R. Fig. 8 c. I	14½ lbs. 1 oz.	75	.....	R.	.....
10	L. No pedicle. ...	2 lbs.	75	.....	R.	.....	Wandering dermoid. L. pedicle severed
11	{ R. Fig 8 c. ... L. Lig. 6.	2½ lbs. ½ oz.	45	.....	R.	.....	L. nearly separated, small cyst with dark contents
12	R. Fig. 8 c. ...	2½ lbs.	60	3 dys.	R.	.....	Cyst ruptured day before during exam. Contents dark, coffee colored, cavity washed out with warm water
13	{ R. Fig. 8 c. I L. Fig. 8 c. ...	7 lbs. 1 oz.	50	.....	R.	.....
14	{ R. Fig. 8 c. I L. Fig. 8 c. ...	21½ lbs. 1½ ozs.	35	.....	R.	.....
15	R. Fig. 8 c. I	24 lbs.	40	.....	R.	.....	Edema of parietes
16	R. Lig. 13.	22 lbs.	60	.....	D. 55 hrs.	ChronicBright's disease	Suppression of urine, contracted kidneys
17	R. Fig. 8 c. ...	13 lbs.	30	26 hrs.	R.	.....	Commencing peritonitis
18	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	1½ lbs. 6 drs.	35	.....	R.	.....	Twisted pedicle
19	R. Fig. 8 c. ...	14 lbs.	25	.....	R.	.....	Very multilocular, colloid, long incision
20	No pedicle.	17 lbs.	125	115 hrs.	R.	.....	Febrile state preceding operation
21	L. Fig. 8 c. ...	21 lbs.	50	.....	R.	.....	Twisted pedicle
22	R. Fig. 8 c. ...	30 lbs.	70	.....	R.	.....	Mitral disease
23	L. Fig. 8 c. I...	28 lbs.	95	128 hrs.	R.	.....
24	{ L. Fig. 8 c. ... R. Hydro-salpinx	¼ lb.	100	70 hrs.	R.	.....	R. ovary could not be found. Mens. cont.
25	R. Fig. 8 c. I...	22 lbs.	55	47 hrs.	R.	.....	Ruptured cyst, peritonitis, P. cavity washed out with warm water
26	{ R. Fig. 8 c. ... L. Lig. 2 c. ...	13 lbs. 2 ozs.	110	5½ dys.	D. 7th dy.	Congestion of the lungs and peritonitis	Chronic cough giving parts no rest, twisted pedicle with hæmorrhage

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
283	Mr. Edw. Calthrop, Hornsey	53	W.	14	...	1885 April 24	None.....	1
284	Dr. Stewart, Nottingham	56	S.	.....	...	May 13	Parietal.....	2
285	Dr. Granville Bantock	54	S.	.....	...	May 19	None.....	3
286	Dr. Mutch, Nottingham	32	M.	3	...	May 21	None.....	4
287	Mr. Boodle, Cirencester	25	S.	1	...	June 24	None	5
288	Dr. Baynes	39	S.	.....	...	July 1	None	6
289	Mr. Hawley, Hoddesdon	30	S.	.....	...	July 22	Very extensive parietal	7
290	Dr. Laking	48	M.	1	...	Sept. 30	None	8
291	Dr. C. Taylor, Nottingham	36	S.	.....	...	Oct. 6	Pelvic	9
292	Dr. Cole, Bath	39	M.	3	...	Oct. 7	Omental, 1 ligature	10
293	Dr. Purnell, Wells	30	S.	.....	...	Oct. 14	Very old and extensive pelvic ...	11
294	Dr. Bury, Nottingham.	45	S.	.....	...	Oct. 28	None	12
295	Dr. McCarthy, Darlington	37	M.	1	...	Nov. 14	Enucleation.....	13
296	Mr. Wynn Williams ...	50	M.	.....	...	Nov. 25	Enucleation from pelvis, many ligatures	14
297	Dr. Bodman, Clifton ...	37	S.	.....	...	Dec 9.	Extensive omental, pelvic, ligatures	15
298	Dr. Bartlett, Ipswich...	36	M.	5	...	Dec. 16	None	16
299	Mr. Allingham	20	S.	.....	...	Dec. 23	None	17
300	Dr. Pope, Malling	22	M.	.....	...	Dec. 30	Omental, pelvic	18
301	Dr. Routh	37	M.	.....	...	Dec. 31	Omental, pelvic	19
302	Mr. Higgs, Leicester ...	50	M.	1	...	1886 Jan. 6	Extensive parietal, omental, pelvic	20
303	Dr. Robinson, Midhurst	30	M.	.....	...	Jan. 15	None	21
304	Mr. Hume, Islington ...	34	M.	2	...	Feb. 3	None	22
305	Dr. World, City Road.	36	S.	.....	...	Feb. 24	None	23
306	Dr. A. B. Harris, Falmouth	45	W.	1	...	Mar. 3	Extensive to uterus, and broad ligaments	24
307	Dr. Pike, Southsea.....	40	S.	.....	...	Mar. 10	Parietal, omental, 4 ligatures ...	25
308	Out-patient Department	30	M.	.....	...	Mar. 18	Very extensive, old, firm, pelvic	26
309	Dr. Dewar, Sloane Street	63	M.	.....	...	Apr. 1	Parietal and omental, 4 ligatures	27
310	Mr. Calthrop, Hornsey	52	W.	.....	...	Apr. 2	Pelvic	28

	Pedicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
1	R. Fig. 8 c. ...	25½ lbs.	50 min.	.....	R.		
2	L. Fig. 8 c. ...	25½ lbs.	35	.....	R.		
3	R. Fig. 8 c. I	12 lbs.	30	.....	R.		A fibroid intra-mural as large as cocoanut
4	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	12½ lbs. 360 grs.	30	.....	R.		
5	L. Fig. 8 c. ...	21 lbs.	20	.....	R.		
6	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	6 ozs.	30	.....	R.		R. small dermoid. L. cirrhotic
7	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	26 lbs. 11 drs.	80	7 days	R.		
8	R. Fig. 8 c. I...	22½ lbs.	30	.....	R.		A fibroid size of goose's egg in posterior wall of uterus
9	{ R. Fig. 8 c. I L. Fig. 8 c. I	21 lbs. 6 drs.	80	3 days	R.		Ruptured papilloma
10	L. Fig. 8 c. ...	11 lbs.	25	.....	R.		
11	R. Fig. 8 c. ...	10½ lbs.	75	6½ days	R.		Dermoid, temp. 100.2. P. cavity washed out with warm water
12	{ R. Fig. 8 c. c. L. Fig. 8 c.	4½ lbs. 11 lbs.	50	.....	R.		Double parovarian. One cyst papillomatous
13	L. Lig. 6	3½ lbs.	90	79 hrs.	R.		Suppurating. Highest temp. 101. P. cavity washed out
14	{ L. Enucleation R. Enucleation	5 lbs. 1 lb.	95	76 hrs.	R.		Double parovarian. P. cavity washed out
15	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	6 lbs. 9 ozs.	115	77 hrs.	R.		P. cavity washed out with warm water. Highest temp. 99.4
16	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	3½ lbs. 600 grs.	25	.....	R.		
17	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	24 lbs. 12 drs.	60	.....	R.		
18	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	1½ lbs. 1 oz.	60	3 days	R.		Highest temp. 100.4. Twisted pedicle
19	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	8 lbs. 154 grs.	60	4½ days	R.		
20	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	22 lbs. 4½ drs.	60	5½ days	R.		Highest temp. 99.2. A chronic abscess between R. ovary and F. tube
21	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	17 lbs. 1 lb.	30	.....	R.		
22	R. Fig. 8 c. ...	1½ lbs.	25	.....	R.		Highest temp. 99.6
23	R. Fig. 8 c. I...	16 lbs.	25	.....	R.		
24	L. Ligatures 9, Enucleation	27 lbs.	85	18 hrs.	R.		Highest temp. 100
25	L. Fig. 8 c. ...	23 lbs.	45	82 hrs.	R.		Recent peritonitis before operation. Temp. 101.6
26	{ L. Fig. 8 c. ... R. Fig. 8 c. ...	½ lb. ½ oz.	90	58 hrs.	R.		L. Suppurating ovarian cyst. Chronic salpingitis both sides
27	L. Fig. 8 c. ...	12 lbs.	50	68 hrs.	R.		Great oedema of peritoneum. P. cavity washed out. Highest temp. 100
28	{ R. Fig. 8 c. ... L. Fig. 8 c. ...	½ lb.	45	4 days	R.		P. cavity washed out. Fibroid uterus

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
311	Mr. Lane, Thames Ditton	51	M.	1	...	1886 May 8	Parietal	1
312	Dr. Smith, Grimsby ...	41	M.	1	1	June 2	Parietal, omental, intestinal, uterine	2
313	Dr. Beresford Ryley ...	56	S.	.....	...	June 3	Parietal	3
314	Dr. Routh	66	W.	5	...	June 16	Large umbilical hernia with adherent omentum	4
315	Mr. Dingley, Argyle Sq.	32	M.	1	...	June 24	None	5
316	Dr. Allfrey, St. Mary Cray	22	S.	.....	...	July 8	Parietal, omental, pelvic	6
317	Dr. Granville Bantock.	55	M.	5	...	July 14	To descending colon	7
318	Dr. Routh	61	M.	5	...	July 15	None. Ascites	8
319	Dr. Adams, Martock ...	26	S.	.....	...	July 17	Complete enucleation of both ovaries	9
320	Dr. Grier, Mevagissey .	58	W.	4	...	July 21	Very extensive parietal	10
321	Dr. Montgomery, Penzance	21	S.	.....	...	Sept. 30	Slight pelvic	11
322	Dr. Davies, Ebbw Vale	21	S.	.....	...	Oct. 6	Universal parietal, extensive omental, several ligatures	12
323	Mr. Elliott, Belvedere	55	W.	.....	...	Oct. 7	None	13
324	Out-patient Department	50	...	9	1	Oct. 13	Omental, 6 ligatures	14
325	Dr. McLean, Portland.	46	M.	8	...	Oct. 22	Omental, 2 ligatures	15
326	Dr. Brisbane, Park road, Regent's park	20	S.	.....	...	Nov. 30	None	16
327	Mr. Robinson, Bedford	28	S.	.....	...	Dec. 8	Pelvic and to right ovary and tube	17
328	Mr. Drake, Portland ...	60	M.	4	1	Dec. 15	Parietal, omental, intestinal	18
329	Mr. L. W. Reynolds, High Wycombe	28	M.	7 mos. pregnant	1	Dec. 20	Parietal and omental	19
330	Dr. Hughes, Llanilar...	49	M.	5	3	Dec. 22	Extensive parietal, 3 ligatures ...	20
331	Dr. Webb, Parson's green, Fulham	22	S.	.....	...	Dec. 30	None	21
332	Mr. Cheatle, Burford...	50	S.	.....	...	1887 Jan. 1	Complete enucleation, many ligatures	22
333	Dr. McLean, Portland .	32	M.	1	...	Jan. 6	None	23
334	G. G. B.	42	M.	6	...	Jan. 20	None	24
335	G. G. B.	50	M.	9	...	Jan. 27	Extensive parietal, omental, intestinal, mesenteric, many lig.	25
336	Mr. Evan Jones, Aberdare	63	W.	5	3	Feb. 2	Parietal, old and firm, 3 ligatures	26
337	Out-patient Department, S. F. H.	30	M.	2	...	Feb. 5	Omental, ligatures	27

Pedicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
L. Fig. 8 c. ...	13 lbs.	25 min.	.....	R.		
R. Fig. 8 c. ...	13 lbs.	60	41 hrs.	R.	.....	P. cavity washed out
R. Fig. 8 c. ...	13½ lbs.	30	.....	R.	.....	Many fibroids in uterus
R. Fig. 8 c. ...	16 lbs.	90	.....	R.	.....	Hernial sac cut out
R. Fig. 8 c. ...	17 lbs.	20	.....	R.	.....	Ruptured cyst
R. Fig. 8 c. ...	2½ lbs.	45	6 days	R.	.....	Twisted pedicle. P. cavity washed out. Highest temp. 99.8
L. Fig. 8 c. I...	13 lbs.	45	2 days	R.	.....	Returned colloid
R. Fig. 8 c. ...	2 lbs.	50	3½ days	R.	.....	R. papillomatous. L. commencing papilloma, washed out P. cavity with warm water
L. Fig. 8 c. ...	2 drs.				.....	Uterus secured by serre nouëd
Double enucleation with hysterectomy	15½ lbs.	115	66 hrs.	R.	.....
L. Fig. 8 c. I...	10 lbs.	45	4 days	R.	.....	P. cavity washed out. Ruptured hæmorrhagic cyst. Highest temp. 102.2
L. Fig. 8 c. I...	28½ lbs.	30	.....	R.	.....	Much fibrinogen. P. cavity washed out
L. Fig. 8 c. ...	.....	50	.....	R.	.....	P. cavity washed out
L. Fig. 8 c. ...	8 lbs.	45	4 days	R.	.....	Ruptured cyst. P. cavity washed out
L. Fig. 8 c. ...	13 lbs.	40	.....	R.	.....	L. sarcomatous with ascites, P. cavity washed out
R. Fig. 8 c. ...	½ lb.				.....	Peritoneal irritation, P. cavity washed out. L. cr. phlebitis and chronic bronchitis before operation
L. Fig. 8 c. ...	.....	35	.....	R.	.....
L. Fig. 8 c. ...	9½ lbs.	25	.....	R.	.....
L. Fig. 8 c. ...	22½ lbs.	50	3 days	R.	.....	Right ovary and tube injured in separating adhesions
R. Fig. 8 c. ...	165 grs.				.....	Twisted pedicle
L. Fig. 8 c. ...	36 lbs.	50	5 days	R.	.....	7 months pregnant, delivery at term
R. Fig. 8 c. ...	17 lbs.	35	.....	R.	.....
R. Fig. 8 c. ...	40 lbs.	35	5 days, 6 hrs.	R.	.....	Ruptured cyst, washed out peritoneum
L. Fig. 8 c. ...	7½ lbs.	25	.....	R.	.....	Irritation of peritoneum, ascitic fluid
L. No pedicle...	13 lbs.	95	56 hrs.	R.	.....	Sac stitched to parietes, tumour ovarian
L. Fig. 8 c. ...	12 ozs.	25	.....	D.	Peritonitis ...	Two dermoid tumours, one ruptured. Should have washed out peritoneum
R. Fig. 8 c. ...	510 grs.	40	.....	R.	.....	Dermoid
L. Fig. 8 c. I...	31½ lbs.	45	4 days	R.	.....	Washed out
R. Fig. 8 c. ...	31½ lbs.	35	6½ days	R.	.....	Washed out
R. Fig. 8 c. ...	4 lbs.	20	.....	R.	.....

No.	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
338	Mr. G. A. Brown, Tredegar	62	W.	13	...	1887 Feb. 10	Extensive parietal	1
339	Out-patient Department	43	M.	0	...	Feb. 21	Parietal.....	2
340	Dr. Spooner, Blandford	50	S.	.....	...	Mar. 10	Parietal, recent, very vascular ...	3
341	Dr. Mutch, Nottingham	38	M.	5	...	Mar. 30	Parietal, omental, several ligatures	4
342	Dr. Jenkinson, Grimsby.	45	M.	10	...	Apr. 6	None.....	5
343	Dr. Trestrail, Aldershot	42	M.	7	...	Apr. 14	None.....	6
344	Dr. McCarthy, Darlington	55	W.	3	...	Apr. 19	None.....	7
345	Dr. McMordie, Belfast.	28	S.	.....	...	Apr. 23	Omentum to tumour and parietes, 6 ligatures	8
346	Dr. Spooner, Blandford	39	M.	2	1	May 7	Omental and parietal, 2 ligatures	9
347	Dr. Wilson, Crewe.....	37	M.	.....	...	May 11	Extensive parietal and tag of omentum	10
348	Dr. Harkness, Debenham	56	M.	6	...	May 20	None	11
349	G. G. B.	26	S.	.....	...	May 21	Extensive pelvic of both.....	12
350	Dr. McWhirter Dunbar	20	S.	.....	...	May 28	Very extensive of both	13
351	Dr. Breward Neal, Wands- worth Infirmary	63	W.	6	...	June 8	None.....	14
352	Mr. Moxon, Northampton	28	M.	8	...	June 13	Intestinal, 8 ligatures.....	15
353	Dr. Bagshawe, St Leonards	32	M.	1	1	June 15	Parietal, omental, many ligatures	16
354	Dr. Harkness, Debenham	39	M.	4	2	June 22	None.....	17
355	Dr. Dobie, Chester.....	34	M.	1	...	July 1	Parietal, omental, pelvic.....	18
356	Dr. Henry J. Philpot ...	53	S.	.....	...	July 4	None.....	19
357	Dr. Frasier, Ascot	55	W.	3	...	July 5	Omental, intestinal.....	20
358	Dr. Schön, Littlebourn	25	M.	.....	...	July 6	None.....	21
359	Mr. Roper, Blackheath	23	M.	2	...	July 13	None.....	22
360	Mr. Dingley, Camden Rd.	54	M.	4	1	July 16	Parietal, omental, intestinal	23
361	Dr. Dudley, Chicago, U.S.A.	27	M.	.....	...	Sept. 8	Omental	24
362	Dr. Dudley, Chicago, U.S.A.	62	M.	.....	...	Sept. 9	Broad base, enucleation	25
363	Dr. Allfrey, St. Mary Cray	62	M.	.....	...	Sept. 18	None, but masses of colloid adherent to omentum, intestine, &c.	26
364	Dr. Permewan, Redruth	25	M.	.....	1	Sept. 25	Universal—parietal, many ligs.	27
365	Mr. Starkie, Pimlico ...	31	M.	2	...	Nov. 2	Pelvic	28
366	Mr. Stormont Murray...	30	M.	.....	...	Nov. 10	Universal	29
367	Dr. Buszard, Northampton	33	M.	4	...	Nov. 23	Pelvic	30
368	Dr. Amand Routh	33	M.	2	...	Nov. 30	Universal both sides	31

No	Medical Attendant.	Age.	Condition.	Children.	Tapping.	Date.	Adhesions, &c.	
369	Dr. Cheeseman, Lymington	24	S.	.....	...	1887 Dec. 1	None.....	
370	Dr. Beresford Ryley ...	34	M.	.....	...	Dec. 5	Pelvic, several ligatures	2
371	Dr. W. C. Grigg	32	M.	.....	...	Dec. 21	Universal both sides, enucleation	3
372	Dr. Arrol, Sheerness ...	18	S.	.....	...	Dec. 30	None.....	4
373	Dr. Wilkin, Beckenham	29	S.	.....	...	1888 Jan. 9	Omental and pelvic.....	5
374	Mr. Stormont Murray	32	S.	.....	...	Feb. 11	Universal	6
375	Dr. Miller, Forest Gate	19	S.	.....	...	Feb. 15	None.....	7
376	Mr. Wickham, Barnes...	44	S.	.....	...	Feb. 29	None.....	8
377	Dr. Collier, Ripon	24	M.	1	...	Mar. 6	None.....	9
378	Dr. Gervis	18	S.	.....	...	Mar. 8	None.....	10
379	Out-patient Department	25	M.	.....	...	Mar. 22	Omental, intestinal, mesenteric, several ligatures	11
380	Dr. Pronger, Barnstaple	36	S.	.....	...	Mar. 28	None. 25 pints ascitic fluid.....	12
381	Dr. Moir, West Ham...	47	M.	5	...	Mar. 29	Enucleation, many ligatures	13
382	Dr. W. C. Grigg.....	23	S.	.....	...	Apr. 12	Omental, 2 ligatures	14
383	G. G. B.	48	M.	6	...	Apr. 16	None, but omentum to parietes...	15
384	Dr. C. H. Gage Brown	29	M.	1	...	June 4	Universal	16
385	Surg.-Major O'Brien, India	34	M.	5	...	June 8	Universal	17
386	Out-patient Department	28	M.	4	...	June 20	Omental, pelvic	18
387	Mr. Arnold, Blisworth	37	M.	5	...	July 4	None	19
388	G. G. B.	45	W.	1	...	July 13	Enucleation, sutures and ligatures	20
389	Dr. Kennedy, Plaistow	31	M.	4	1	July 23	Universal.....	21
390	Dr. Pope, Tring.....	32	M.	3	1	July 27	Universal, parietal	22
391	Dr. Alexander, Liver- pool	49	S.	.....	...	Aug. 11	Broad base, enucleation of right from broad ligament and uterus	23
392	Dr. Forman, Stoke Newington	31	M.	6	1	Oct. 1	None	24
393	Dr. Grabham, Pontefract	49	.....	9	...	Oct. 4	Omental	25
394	Mr. Garraway, Faver- sham	56	S.	.....	...	Oct. 5	Extensive parietal ..	26
395	Mrs. Garrett Anderson, M.D.	50	M.	.....	...	Oct. 8	Enucleation from broad ligament and uterus	27
396	Mr. Willis, Soham.....	46	S.	.....	...	Oct. 22	None.....	28
397	Dr. C. Routh, St. Leo- nards	54	S.	.....	...	Oct. 30	Universal	29
398	Dr. Johnson, Tunbridge Wells	56	S.	.....	1	Nov. 5	Parietal	30
399	Mr. Moxon, Northamp- ton	36	S.	.....	...	Nov. 14	Extensive parietal, very vascular, recent	31
400	Dr. Ross, Belfast	33	W.	2	...	Nov. 17	None.....	32

Pedicle.	Weight of Tumour.	Duration of Operation.	Drainage.	Result.	Cause of Death.	Remarks.
{ L. Fig. 8 c. ...	20½ lbs.	25	.....	R.		
{ R. Fig. 8 c. ...	286 grs.					
R. Fig. 8 c. ...	½ lb.	35	.....	R.		Some fibroids in uterus have diminished one half in 6 mos. Also papilloma of tube, washed out
{ No pedicle R.	1½ lbs.	100	65 hrs.	R.		
{ L.	½ lb.					
R. Fig. 8 c. ...	32 lbs.	25	.....	R.		
{ L. Fig. 8 c. ...	7 lbs.	55	5½ dys.	R.		Washed out
{ R. Fig. 8 c. ...	400 grs.					
{ L. Fig. 8 c. ...	1 lb.	60	25 dys.	R.		Blood cyst left ovary, washed out, India-rubber tubing in place of glass on 13th day
{ R. Fig. 8 c. ...	200 grs.					
R. Fig. 8 c.	16½ lbs.	25	.....	R.		Dermoid
R. Fig. 8 c. I. ...	3 lbs.	25	.....	R.		Dermoid, twisted pedicle
R. Fig. 8 c. ...	5½ ozs.	25	.....	R.		Parovarian
L. 4 Ligatures...	4 lbs.	40	.....	R.		Dermoid, teeth, &c.
{ L. Fig. 8 c. I	10½ lbs.	50	52 hrs.	R.		Twisted pedicle, washed out
{ R. Fig. 8 c. ...	322 grs.					
{ R. 6 Ligatures	6 lbs.	80	5 days	R.		Double sarcoma. Died May 8th.
{ L. 5 Ligatures	6 oz.					
{ R. No pedicle	9 lbs.	110	4½ dys.	R.		Washed out
{ L.	4 ozs.					
R. Fig. 8 c. ...	13½ lbs.	35	.....	R.		
L. Fig. 8 c. ...	19 lbs.	60	.....	R.		Second operation; 1st, May 2, 1887; twins M. and F. April 26, 1879
{ L. Fig. 8 c. ...	¾ lb.	75	5½ dys.	R.		Small intestine wounded, sutured. Perit. washed out
{ R. Fig. 8 c. ...	460 grs.					
{ L. Fig. 8 c. ...	¾ lb.	55	4 days.	R.		Washed out
{ R. Fig. 8 c. ...	1 oz.					
{ R. Fig. 8 c. ...	8½ lbs.	40	91 hrs.	R.		Washed out
{ L. Fig. 8 c. ...	¾ oz.					
L. Fig. 8 c. ...	18 lbs.	14	.....	R.		Parovarian
{ L. No pedicle	1½ lb.	75	77 hrs.	R.		Ascites 16 pints, papilloma, washed out
{ R. Fig. 8 c. I	2 ozs.					
{ L. Fig. 8 c. ...	19½ lbs.	60	3 days	R.		Suppurating, chronic bronchitis, recent peritonitis
{ R. Fig. 8 c. ...	2 ozs.					
L. 3 Ligs. & Fig. 8 c	17½ lbs.	60	3 days	R.		Suppurating, cedematous, washed out. Puerperal mania at time of operation
{ R. 4 Ligatures	19 lbs.	95	9 days.	D.	Exhaustion	In last stage. Large fibroid in uterus
{ L. Fig. 8 c. I	2 lbs.			9th day		
{ L. Fig. 8 c. ...	7 lbs.	25	.....	R.		Parotitis 10 days after. Highest temp. previously 99.4
{ R. Fig. 8 c. ...	½ oz.					
R. Fig. 8 c. I. ...	27 lbs.	35	.....	R.		
{ L. Fig. 8 c. I	24½ lbs.	.....	3 days	R.		Malignant, washed out. Died after return home.
{ R. Fig. 8 c. I	1 oz.					Extreme spinal curvature
R. No pedicle...	14½ lbs.	60	5 days	R.		Washed out
R. Fig. 8 c.	19 lbs.	20	.....	R.		
{ R. Fig. 8 c. ...	11b. 12oz	50	2 days	D.	Chronic Bright's disease	Twisted pedicle, washed out
{ L. Fig. 8 c. ...				7th day		
L. Fig. 8 c. 2 ...	24 lbs.	30	.....	R.		
{ L. Fig. 8 c. I	22½ lbs.	35	3 days	R.		
{ R. Fig. 8 c. ...	½ oz.					
L. Fig. 8 c. 2 c. ...	14 lbs.	50	2½ days	R.		Ruptured cyst, washed out

NOTE.—Fig. 8 c. 1 means that the outer edge was first secured by a ligature (1), then that the pedicle was sutured and secured by a fig. of 8 knot, and finally that the whole was encircled by another (c)

First series of twenty-five Abdominal Sections. By FANCOURT BARNES, M.D., C.M., Physician to the Chelsea Hospital for Women and to the British Lying-in Hospital.

THE following is the complete list of all cases in which I have opened the abdomen at the Chelsea Hospital for Women up to the present date. No case has been withheld. It seems to me that a more useful insight into the mortality of abdominal sections is obtained from a general list of all cases like the following, than from selected series of one set of operations, such for instance as oophorectomy.

No. of Case.	Name.	Age.	Married or Single.	Nature of Case.	Date of operation.	Result.
1	H. L.	58	M.	Suppurating omental cancer, exploratory incision	Dec. 6, 1883	R.
2	F. B.	26	M.	Pyosalpinx, exploratory incision. Operation incomplete	Jan. 7, 1884	R.
3	A. F.	17	S.	Simple ovarian cyst	Sept. 11, 1884	R.
4	M. S.	34	M.	Multilocular ovarian. Parietal and intestinal adhesions	Aug. 27, 1885	R.
5	B. T.	62	M.	Ovarian cyst	Sept. 3, 1885	R.
6	E. M.	49	M.	Large multilocular cyst	Dec. 3, 1885	Died 19 days after operation.
7	R. H.	65	M.	Large multilocular cyst	April 5, 1886	R.
8	M.A.R.	64	M.	Multilocular ovarian	May 13, 1886	R.
9	L. C.	38	M.	Ovarian cystoma. Adhesions to abdominal wall and intestines	May 24, 1886	R.
10	J. W.	53	M.	Ovarian cyst	June 2, 1886	Died.
11	A. S.	20	S.	Cancer of omentum	June 23, 1886	Died.
12	H. M.	41	M.	Ovarian multilocular cyst	Sept. 23, 1886	R.
13	S. F.	32	M.	Pyosalpinx left and left ovary	Feb. 16, 1887	R.
14	S. J.	29	M.	Malignant disease of peritoneum	May 3, 1888	R.
15	E. H.	20	S.	Enchondroma of omentum, adhesions	Sept. 17, 1888	R.
16	A. G.	28	S.	Oophorectomy	Oct. 11, 1888	R.
17	E. L.	30	M.	Right ovary and myoma removed	Dec. 3, 1888	Died from fecal fistula 26 days after operation.
18	C. W.	40	M.	Ovarian cyst	Feb. 4, 1889	R.
19	J. E.	38	M.	Ovarian cyst	Feb. 28, 1889	R.
20	E. H.	31	S.	Left ovary removed	Mar. 14, 1889	R.
21	R. S.	32	S.	Porro's operation with fibromyoma	May 16, 1889	R.
22	M. L. A.	41	M.	Large ovarian cyst	Sept. 9, 1889	R.
23	E. B.	35	M.	Ventral hernia	Sept. 12, 1889	R.
24	E. L.	40	S.	Cyst of right ovary and left ovary removed	Sept. 23, 1889	R.
25	E. T.	35	S.	Large ovarian cyst, colloid	Sept. 26, 1889	R.

REVIEWS.

Gynæcological Electro-Therapeutics. By HORATIO R. BIGELOW, M.D., with an introduction by Dr. GEORGES APOSTOLI. With illustrations. London : H. K. Lewis, 1889.

In his preface the author states:—"As to the class of cases in which the electric treatment stands us in good stead, I should specify:—

Fibroid tumours of the uterus.

Hypertrophy of the uterus.

Non-suppurative salpingitis.

Metritis.

Endometritis.

Subinvolution, superinvolution.

Disorders of menstruation.

Ovarian pain.

Chronic oophoritis.

Peri-uterine inflammations.

Displacements.

Hæmatocele.

Some hystero-neuroses.

Stenosis of the cervical canal.

Erosions of the cervix.

Nausea of pregnancy."

Surely this is rather a long list, and if it is only true, as the author states, that the electric treatment could even alleviate such a lengthy and varied catalogue of complaints, it would indeed have a great future before it. We confess, however, that we can hardly credit electricity with such a universal power of cure. The list rather reminds one of similar lists, not always, so long, of diseases which can be cured by some German watering places. There is a long introduction by Dr. Apostoli, in which he sets forth his rules for the application

of the induced current, the galvanic current, and galvanopuncture. He says:—"No electrical treatment once commenced should be terminated until the patient pronounces herself to be symptomatically cured, and until a considerable anatomical resolution can be made out. Surgery should not be demanded in salpingo-ovaritis until electricity in its various forms has proved to be of no avail after a sufficiently long trial. Castration, which morally and physically deforms a woman, which sometimes kills, and which only permanently cures in two-thirds or a-half of all the cases, should be the operation of necessity and never of choice, and the ultimate resource of the therapeutics of the adnexæ. The electrical therapeutics which I advise is conservative, in-offensive, easily applied, and which if it does not presume to cure radically all cases of salpingo-ovaritis, finds its amplest reward in the fact that a normal subsequent impregnation is possible, as I have seen in many of my patients." We believe that Dr. Apostoli is not himself a surgeon and we must express our surprise that he should venture to restrain surgeons from performing necessary and legitimate operations which he himself does not practise.

The logical outcome of his doctrine is, that no gynaecologist should commence any treatment whatever until the patient has undergone a full electrical cure. Such a claim as this can only be regarded as unscientific and impertinent.

The rest of the book calls for no comment. It consists of a description of definitions, laws, electric unities and other technicalities connected with the various apparatus employed in electro-therapy. The work concludes with a description of the operative procedures adopted in the treatment of the conditions enumerated in the list we have already quoted.

The Retrospect of Medicine. A Half-yearly Journal. Edited by JAMES BRAITHWAITE, M.D.Lond. London: Simpkin, Marshall & Co., July, 1889.

As regards the section of midwifery, and diseases of women the present number fully maintains its reputation.

in an interesting article on Professor Trendelenburg's posture, its adoption in gynæcological examinations, Mendes de Leon, in a recent number of the *Centralblatt für Gynäkologie*, describes how he adopted the plan suggested by Trendelenburg in cases of epicystotomy, in order to reach deeply-seated and adherent ovaries, which he was endeavouring to remove by laparotomy. The pelvis was elevated by bending the legs of the patient over the shoulders of two assistants, who stood with their backs towards the foot of the table. The ovaries were easily reached, as the intestines gravitated out of the pelvic cavity. The writer suggests that this method is also applicable to ordinary gynæcological examinations, when it is difficult to practise the bimanual on account of tympanites. The patient is placed on a lounge, with her head towards its foot, and her feet hanging over its back. In this position it is claimed that the pelvic viscera can be palpated with much greater ease than is possible by the ordinary method. Among other recent contributions under review is an account of four Porro operations by Mr. Lawson Tait, in which all the mothers and all the children recovered.

Curvatures of the Spine. By NOBLE SMITH. Third edition. London: Smith, Elder, & Co., 1889.

In this work the system of treatment advocated by the author commends itself to us as being based upon sound practical common sense. Exercises take an important place, while prolonged recumbency is disapproved of. Jackets and heavy instruments are condemned, but in cases where it is evident that some mechanical support will facilitate or hasten the improvement or cure, then an extremely simple apparatus is advised. This apparatus does not interfere with the use of the muscles, and leaves the front of the thorax perfectly free from pressure.

The aim of the author seems to be to simplify treatment in every way, while his general description of the nature of the cases is very lucid and complete.

In the Chapter on Diagnosis he shows a keen appreciation of the necessity for care being taken not to attribute to spinal trouble symptoms which are due to other causes.

OBITUARY.

PROTHEROE SMITH, M.D., M.R.C.P.

IT is with deep regret that we have to record the death of another of the Foundation Fellows of the British Gynaecological Society. Dr. Protheroe Smith died on Sunday, the 29th of September, at his residence in Park Street, Grosvenor Square. He had reached the mature age of eighty years. He was one of the first Vice-Presidents of the British Gynaecological Society, and was Consulting Physician to the Hospital for Women, Soho. The deceased was born in November, 1809, and educated at Bideford, in Devonshire, where he was apprenticed to his father, Dr. William Smith, a well known and successful practitioner, in that town. In the year 1830 he came up to London, and commenced his medical studies at St. Bartholomew's Hospital. During his period of medical study he became the private pupil of Mr. Kiernan, in whose house he had the privilege of residing. Having completed his medical studies, and taken his degree in medicine in the University of Aberdeen, he entered into practice and was soon appointed surgeon to the Farringdon Dispensary, with which institution he was connected as consulting physician at the time of his death. Later he became associated with the well-known Dr. Rigby, as co-lecturer on Midwifery and Diseases of Women at St. Bartholomew's Hospital. From this time forward he resided in Park Street, where he continued to practise until his death. In the year 1842 he founded and successfully started the Hospital for Women in Red Lion Square. This, as is well known, was the first hospital of its kind in this country. The old building gradually became



PROTHEROE SMITH, M.D.

FORMERLY VICE. PRESIDENT OF THE BRITISH GYNÆCOLOGICAL SOCIETY.

inadequate for the demands upon its space, and a new building was erected—the present one in Soho Square.

As a gynæcologist Dr. Protheroe Smith was one of the early pioneers in this country, along with Dr. Robert Ferguson and Dr. Henry Bennet. We believe that he was the first accoucheur in London who resorted to the use of anæsthetics in midwifery, in the year 1847. He also was one of the first English ovariologists, having removed an ovarian tumour in 1842 without anæsthetics. For some time he was a valued contributor of reviews and other articles to *The Lancet*. He was the author of "Scriptural Authority for the use of Chloroform and other Anæsthetics in Midwifery," "On Flexions of the Uterus," "Ovarian Dropsy, its Pathology and Treatment," and other works. Among the various inventions which he contributed to the gynæcological armamentarium we may mention the following :—

Double cylindrical speculum for simultaneous sight and touch.

—*Lancet*, February 22nd, 1845.

Uterine sound and dilator, 1846 (previous to Simpson).

Chloroform inhaler, 1848.

Double-bladed hysterostome, 1850.

M. aspirator, 1867 (this was previous to Dieulafoy and shown to Robert, of Paris).

The pelvic band for rectifying pelvic deformity (of axis) in connection with uterine flexions, 1870.

Parallel uterine sound, for indicating the position of the uterus.

Masticator for division of pedicles without hæmorrhage.

Expanding cylindrical speculum.

Sliding hysterotome.

The elastic pessary for retroflexion.

Detractor for the removal of foreign bodies from the bladder.

Uterine paste-caustique, used with solids or fluids.

Uterine irrigator.

Serrated scissors, which cut without slipping.

Obstetric bandage for aiding expulsion force in labor.

Trocar and canular, for removal of specimens of solid tumours.

Gynæcological vade mecum, a cylindrical spec.

Pneumatic plug for facilitating the introduction of a speculum.

Uterine dilator.

Dr. Protheroe Smith enjoyed a large lucrative practice for many years, and left a numerous circle of friends to mourn his loss. He leaves a son, Dr. Heywood Smith, the well known gynæcologist in practice.

**SUMMARY OF GYNÆCOLOGY, INCLUDING
OBSTETRICS.**

BRITISH MEDICAL JOURNAL.

Permanganate of Potassium, influence of, on Menstruation.

By W. STEPHENSON, M.D.

I have been able to collect 105 cases in which reliable results were obtained. Potassium alone has been used. It was prescribed in the form of pills, containing two grains of the salt with sufficient kaolin ointment; one pill three times a day after meals; in a few cases twelve grains a day was taken. Many of the patients continued to take the pills regularly for two and three months. In only three cases did they complain of any pain after the medicine, and in these, reducing the number of pills per day, or the dose in each, was sufficient. My experience, therefore, is different from that of Dr. Doering, of America, who found that, "the administration of the drug in doses large enough to be effective is accompanied by severe pain, which frequently necessitates a discontinuance of the remedy, and hence impairs its value as an emmenagogue." This result is explained by the mode of administration. He recommends it to be given in "capsules, taken midway between meals, and followed by large draughts of some pure mineral water." The drug is thus thrown rapidly in solution on the stomach, whereas the pills undergo very slow disintegration.

Amenorrhœa is the test which has mainly been used for the action of the permanganate, and, therefore, naturally leads to a condition which tends to right itself. Unfortunately, it is deceptive. The greater part of the evidence adduced is, nevertheless, composed of such cases. The authors of the paper first referred to state: "Our most striking results have

been obtained in young women between the ages of eighteen and twenty-five, who from some accidental or trivial cause, such as catching cold or getting wet, have missed once or twice after having been irregular."

Evidence of this character must be accepted with caution; and, did the belief in the action of the permanganate rest on such alone, it would require a very large number of successive cases (not cases taken here and there) to eliminate the uncertainty that is inseparable from the affection. Two of my cases were instructive in this respect, for they both menstruated before they had taken the pills.

In so-called emmenagogue remedies I have no belief, and that such is not the action of permanganate of potassium is evident, for I have found it as serviceable in restraining the menstrual flow when in excess as in promoting its recurrence when suppressed.

Of the beneficial effect of the drug in amenorrhœa I have no doubt, but this opinion is not based on the result of the treatment of such cases alone. Corroborative tests can be used. First, where menstruation has not been suppressed, but the intervals between the periods have been irregular, does the permanganate promote regularity? Secondly, where the periods have been regular, but the quantity has been scanty, does the permanganate increase the amount of the discharge? And thirdly, has the remedy any influence in modifying the amount of suffering experienced at the periods?

An analysis of the 105 cases gives the following results on these points: Of amenorrhœa, where menstruation had previously been fully established, there are twenty-two cases. Of these the flow was re-established in twelve cases, and no such effect in eight; in two, the remedy acted well at first, but on a subsequent amenorrhœa it failed. Of primitive amenorrhœa, or where menstruation had been imperfectly established, there are ten cases; in six, good results were obtained, and in four none. In seventeen cases the interval was too long, but otherwise menstruation was natural; in five of these there was marked improvement, in two the character

remained the same. In twenty-one cases menstruation was scanty in amount, and too long between the periods ; in eleven there were good results, in ten no improvement. In eighteen cases there was very marked improvement in the amount of pelvic pains, and frequently the patients stated that they felt much stronger during the periods, and were not "so pulled down."

In estimating the value of these general results, it must be remembered that in the inquiry the permanganate of potassium was prescribed indiscriminately, with the view of testing its action ; the failures are, therefore, more numerous than they otherwise would have been had cases deemed most suitable been selected. Thus a number of them were cases of chlorosis, where iron should first have been employed or given in conjunction with the manganese.

Together with the above tests, there is another which should be taken along with them, that is, the marked action of the remedy in checking leucorrhœa. This effect I observed early in the investigation. The action is very reliable, and generally immediate, but in some cases it is obtained only after the first menstrual period ; in two cases only there was no improvement in the leucorrhœa, and as both were unmarried no examination was made.

Whilst treating a case of long-standing amenorrhœa, I found that, without menstruation being restored, she had been relieved of severe headaches from which she had suffered for four years. This directed my attention to the subject of menstrual headaches. Since that time I find amongst my notes twenty-nine cases in which headaches were a prominent symptom ; in only four of these was no relief obtained.

There is one striking case where the patient, aged thirty-five, had suffered from headaches all her menstrual life. They occurred on the first, and occasionally the last, day of each period, but for three years they have returned every fortnight, at the mid-period. Since taking the permanganate (now nine months) she has not had a headache.

The headache of the menstrual period was not always

removed, but generally greatly moderated. The best results were obtained in cases where the headaches had begun to return in the intervals, once a fortnight, then weekly, and at times two or three times a week.

In a similar manner I was gradually led to the fact that the permanganate has a marked influence in relieving ovarian pain. Amongst the notes there are twenty-two cases in which the ovarian spot pain was a special symptom. They were all more or less relieved, some in a very marked manner. I now prescribe the remedy in all cases of functional ovarian pain with as much confidence as I do in leucorrhœa. The relief is not always complete or permanent, but there is ample proof that the drug exerts a beneficial influence over this very intractable symptom.

As this subject thus became widened, another point demanded attention. Has the permanganate any influence over menstruation when it is in excess either in time or in quantity? I have notes of twenty-seven cases where this condition was present, and in two only was there no improvement. The beneficial effect in this respect is even more marked and reliable than in the opposite condition of suppressed or scanty menstruation. There is here less likelihood of wrongly attributing the improvement to the medicines, and some of the cases leave no room to doubt the action of the remedy. Thus one patient, aged forty-four, had for nine months menstruated every fortnight, and any excitement would bring it on. For the first four days of a period the discharge was very free, and thereafter moderate for other six days, making ten in all. The first menstrual period came on a week after beginning the medicine, with but little improvement; the second menstruation, at twenty-eight days' interval, quantity less but still free, lasted five days, instead of ten; third menstruation, twenty-six days' interval, lasted six days, "not so pulled down," general health improved; fourth menstruation, twenty-eight days; fifth menstruation, twenty-four days, quantity normal. The effect is thus observable both as to time and quantity.

THE ARCHIVES OF GYNÆCOLOGY.

Peritonitis due to the Passage of the Constant Current in a Patient with Double Salpingitis. By M. TERRIER, in *Bull. Med.*

A year since the author was called to a woman in whom the presence of abdominal tumours could be made out, which, after some hesitation, were diagnosed to be uterine fibromata. M. Terrier, however, doubted the accuracy of this diagnosis, and, acting in the belief that it was a case of double salpingitis warned the patient that only an operation would relieve her. Disregarding his advice she resorted to the electrical treatment, which promptly determined a severe attack of acute peritonitis. The patient, however, survived, but the salpingitis had obviously increased in size, and the matting of the intestines could be felt in one spot through the abdominal parietes.

AMERICAN JOURNAL OF OBSTETRICS.

Extra-Uterine Pregnancy.

By J. FORD THOMPSON, M.D., Washington, D. C.

I think that no one subject has occupied more of professional attention during the last year or two than extra-uterine pregnancy; and as it has never been brought before this Society for discussion, this appears to me an opportune moment to participate in the consideration of a question which is claiming so much of the time and talent of medical societies at home and abroad.

Dr. Smith, a few weeks ago, presented a post-mortem specimen which would serve better as a text for discussion than the one I shall present, although mine is not wanting in interest, and it may serve to illustrate several points in the course and management of this but imperfectly understood subject.

I regret that I am unable to give a complete and connected history of my case, but, as the patient came under

my care at about the end of her troubles, I can only relate what she says of her condition previously, without vouching for its accuracy in its details.

Mrs. S., æt. 22, a handsome, well-developed woman, had been married three and a half years when she consulted me in April of last year. She had been well and regular during her married life up to May, 1887, when her menses ceased. Her period was due on the 15th of May. Soon after this time she experienced morning nausea and general malaise, and frequently during the night had attacks of nausea and sometimes vomiting.

This condition continued till July 10th, when she was taken with excruciating pain in lower abdomen, the attack coming on while she was in a reclining position reading. She was confined to bed for three or four days. She had about three of such spells at intervals of three weeks, and was confined to bed two or three days after each, and remained sick and complaining between the attacks. In September she had the last, which was much worse than the previous ones; she was extremely prostrated and was confined to her bed for a longer period. At this time she first noticed abdominal enlargement.

She had during the summer—she was not exact as to time—a discharge of shreddy or membranous pieces from the vagina.

Two or three physicians had seen her in her various attacks, but it does not appear that any diagnosis was made further than cramp or colic. When better, about three weeks later, she went to California. She had a slight show of menses in October. She consulted a physician in Stockton, who diagnosed pregnancy.

She remained in California during the winter under the care of Dr. G——, who in the meantime concluded that she was not pregnant, but had a uterine fibroid. He examined her several times instrumentally. She had more or less abdominal pain and vesical irritation.

In the early spring she returned to Washington, and

consulted me in April, 1888. I examined her carefully and found a tumour about the size of a large orange, or perhaps a little larger, low down in the abdomen and to the left side. Her principal annoyance was with the bladder, micturition being very frequent. Her general condition appeared good, but both she and her husband declared that she had lost considerable flesh. My opinion was that she had ovarian cyst or uterine fibroid, and I advised her to await further developments.

As in May there was a sudden increase in the size of the tumour and considerable abdominal pain, I asked Dr. Busey to see her with me. We examined her carefully, using the sound, but we were unable to determine satisfactorily the nature of her case, although we considered the possibility of ectopic gestation. Symptoms of cystitis increased in violence, and our attention was principally given to alleviation of this condition. Her urine was thick and loaded with sediment, and she remarked one day that she had been passing quite a number of pieces of hard substances, one of which she preserved. It was the small piece I here present. I regret very much that I did not pay more personal attention to her urine during this time, as I might have procured such a number of pieces as to make the specimen more interesting and satisfactory from a diagnostic point of view; but she declares that she passed at least a dozen pieces and much thick, tenacious matter.

By June 1st she was much better; the abdominal tenderness had subsided and the tumour much diminished in size. June 13th: has just passed through menstrual period and feels almost well.

I took the piece she had passed to Dr. Gray, who examined it under the microscope, and he declared without hesitation that it was undoubtedly bone, but was unable to state which it was.

I think there is no doubt that this was a case of extra-uterine pregnancy terminating in discharge of the foetus by ulcerative process through the bladder. In works referring

to this subject, the bladder is mentioned as one of the routes of escape of the foetus; but I have not looked up the subject, and am therefore unable to state how many such cases are recorded or the symptoms accompanying the process.

It appears from the history of this case that the first attack occurred about the eighth week and the last about the fourth month. What took place during the various attacks, four in number, it seems difficult to conjecture. As rupture in tubal pregnancy frequently occurs about the eighth week, it is possible that this took place at her first painful symptoms; and yet it appears improbable that she would have recovered so readily from so serious a mishap. Or the rupture may have been only partial, and this occurred again and again till the last, in September, when it was complete. I must admit my inability to explain intelligently the course of the case, but I have at least the consolation of knowing that the cure is not by any means unique in this respect, and that I am not alone in being unable to interpret correctly the incidents of this condition.

I saw my patient a few days ago: She is well; the tumour has disappeared, and she menstruates regularly. She is unhappy only because she does not become pregnant, and seems willing to run all risks for the sake of a child.

Now, what are we to do in similar cases? This woman appears to have had, according to her account, all the usual signs of pregnancy, and at the eighth week the symptoms of rupture of the tube. Should she have been operated on then or at any of her subsequent seizures? Of course it is impossible to give a positive affirmative answer in this particular case, because we are ignorant, in a measure, of the severity of the seizures and of the difficulties of making a correct diagnosis which may have been encountered; but I think that there cannot be two opinions concerning the correct practice when these points are clear. An immediate operation under such circumstances is imperative and gives the woman almost her only chance of life. I say almost, because, as this case

proves, a woman may recover—and many have recovered—but from every surgical point of view it appears inexcusable to allow one to run such risks when a timely interference might relieve her of all present and future trouble with but little more danger to life than an oöphorectomy, the additional danger being loss of blood and shock.

But the ideal operation for ectopic gestation is that before rupture takes place. I appreciate the fact that this is a difficult question to determine, but I contend that the difficulty is merely one of diagnosis, and I also hold that obstetricians and abdominal surgeons should diminish these difficulties. If the surgeon makes out the tumour and the obstetrician the signs of pregnancy, I can see no reason why there should not be accord in the only reasonable and rational plan of treatment suitable to the case. But there is not, and obstetricians are still discussing the best methods of killing the foetus *in situ*, such as evacuating the sac with trocar and cannula, injections of lethal fluids, &c., and the latest is the use of electricity for that purpose, which is now being employed in numerous cases. I should say that they are all alike unscientific, as they do not protect the woman from future trouble in the majority of cases, and are not devoid of danger in themselves; whereas the operation of extirpation is simple, successful, and final, especially when the case is tubal. Where the pregnancy is interstitial, I admit that there are grounds for doubt about the best method of interference.

To Tait is due the credit, more than to any other, of establishing the advantages of the early operation, by bringing it so prominently before the profession with his large number of successful cases.

If the operation be deferred for any reason, it is seen that the woman runs great risk of sudden rupture and death, as was the case with Dr. Smith's patient. Many such accidents, of course, must happen, for a large percentage of cases reach this fatal termination under circumstances in which no diagnosis can be made; but it is clear that his case should have been operated on immediately with hope of success, although

the doctor says her condition was such as to preclude the question of interference at the time he saw her. But certainly one would be justified in operating in extremes, if there were sufficient reason to suspect the true condition.

It is thought that if rupture does not take place before the fourth month, pregnancy frequently goes on to full term, when, spurious labour occurring, the child dies; and if the mother survive, other dangers are encountered. Atrophic changes may follow in the foetus, such as infiltration of calcareous matter or its transformation into adipocere; or decomposition with suppuration and abscess, with discharge of contents, most frequently into one of the hollow viscera, as bowel or bladder; or it may rupture through the abdominal wall. In all of these terminations there is great danger to life of the mother. It is estimated that three-fourths of all cases die, more than one-half from rupture of the sac.

It may be said then that, in all cases in which the diagnosis can be made out, the operation should be performed without delay, and also the immediate operation should be resorted to in all cases of rupture when this condition can be diagnosed. It appears that up to the fifth month of pregnancy the rule should be to operate, the child being alive, but between the fifth month and period of false labour operation is not advisable.

It is proper also to operate after false labour when the child is dead and the amnion absorbed, and in all cases of suppuration; but when the foetal remains are quiescent, operation is not urgent. In all cases and conditions dangerous to the mother, interference is imperative.

The early operation, as has been said, is simple, easy, and successful, the sac and contents being removed together as in an ordinary ovarian cyst.

When the sac has ruptured, of course the danger is greater; but when performed without delay, the operation is usually attended with success. The ovum has to be extracted, blood cleaned from the peritoneal cavity, and the sac removed.

After the end of the fourth month, the dangers increase

and difficulties are encountered when the foetus is viable. Here it becomes unsafe to attempt the removal of the sac with its contents, and another line of practice must be adopted. The safest plan is to incise the sac, when there is one, remove the foetus, cleanse the cavity and stitch the edges of the sac to the abdominal opening, and leave the placenta to separate naturally. In some cases, the removal of the placenta may be proper, but never when there is no proper sac, and the greatest care should be exercised to avoid wounding it. The after-treatment locally consists in free drainage and washing out the sac.

The operation for extirpation after term is admitted by all to be attended with great dangers and difficulties. The adhesions are often so great that only a part of the sac can be extirpated, the remainder being attached to the abdominal wall and thoroughly drained. I have only alluded to the difficulties likely to be encountered in the late operations, without any attempt to describe them, as it would take much time, and, besides, has no special bearing upon the case I report.

The condition of ectopic gestation in Mrs. S.'s case appears never to have been made out, and I doubt whether the most experienced could at any time have been so sure of a diagnosis as to have felt justified in operating. After she came under my observation, upon one occasion only were symptoms of such a character as to indicate anything more than an ovarian or uterine tumour. This was when Dr. Busey saw her with me the second time. There was apparent sudden enlargement of tumour, with abdominal pain and some distension, but her general condition was so favourable that no surgical interference was thought of by me at the time. In a few days these symptoms began to subside as the vesical irritation and discharge increased.

It is by no means clear to me what took place at this time to cause these symptoms. The only explanation I can suggest is that, as the ulcerative process made an opening into the bladder, urine passed into the sac as the foetal contents passed downwards; as soon as the sac was emptied, it began to con-

tract and close, and was thus relieved of the irritation of the urine.

I am compelled to admit that this is not a forcibly presented case of extra-uterine pregnancy, but, after much thought expended upon it at the time and since, I see no other interpretation of her symptoms. It is fortunate I succeeded in getting the small bone, for without that I should have had no case. At least there would be too much doubt surrounding it to warrant its being presented here. As it is the inference, if not absolute certainty, is in favour of our diagnosis.

TRANSACTIONS OF THE GYNÆCOLOGICAL SOCIETY OF
CHICAGO.

Regular Meeting, Friday, April 19th, 1889.

The President, CHARLES T. PARKES, M.D., in the Chair:

Dr. HENRY T. BYFORD exhibited forceps for the broad ligament in vaginal hysterectomy. These forceps were designed exclusively for the broad ligament in vaginal hysterectomy. Their peculiarities are that they have a pelvic curve, are a little longer than the ordinary large hæmostatic forceps used, while the lower blade is a little longer than the upper one and has a projection so as to catch over it. I have used them satisfactorily in two cases. They are made by Truax & Co.

Dr. H. T. BYFORD exhibited a calculus from the right ureter. At the December meeting I exhibited the larger of these urethral calculi, which is $1\frac{3}{4}$ by $\frac{5}{8}$ by $\frac{3}{4}$ inches. Its mate was passed March 6th and 7th, and is of about the same diameter, viz. $1\frac{1}{2}$ inches long, making both of them as they lie in the right ureter $3\frac{1}{4}$ inches.

The second stone was felt on several occasions in the ureter after the passage of the first. In February, I grasped it bimanually, without the aid of an anæsthetic, and drew it down towards the trigone, endeavouring to coax it into the bladder. Although I stirred it seemingly half an inch, I

thought it judicious, after an hour's trial, to give up the attempt. March 6th she was taken at 7 P.M. with cramps in the right iliac region, starting from the lumbar region, accompanied by chills, and vomiting of bile, and "empty straining." This attack ceased at 9 P.M. She rested well until 7 A.M., when she was taken with pain in the urethra and had a desire to evacuate the bladder. After half-an-hour's very painful straining, as she called it, the stone dropped into the vessel. Thus we had the passage of a stone through the lower inch of the ureter in two hours and through the urethra in half-an-hour, and just ten hours after its arrival in the bladder. What influence my attempt at delivery bimanually may have had I cannot say, although I think that it dislodged it from its bed. The lower end of the ureter is still twice the thickness of that on the opposite side.

Dr. ETHERIDGE: Do you think the water escaped down the side of this stone and came out?

Dr. BYFORD: Yes, sir. When the urine could no longer escape, the stone was forced out. On several occasions urine accumulated behind the stone, but had always forced a passage beside it after a few hours of colicky pains. Her health has been perfectly good since.

Dr. J. H. ETHERIDGE: There is one alteration in these forceps, which it seems to me if the doctor would make would make them about perfect. A forceps of that length will, in a very fat subject, encroach upon the thigh of the opposite side very decidedly, and for that reason it would be necessary to have a left and right hand forceps. For instance, suppose this was to go on the *left* Fallopian tube; you can see how the lower end would hit against the *right* thigh. If he would take this handle and curve it a little, so as to bring it, when *in situ*, straight out of the vagina, I think it would improve it very much. I had a woman under my care upon whom I used a forceps two inches shorter than those for clamping the broad ligaments, but it was straight, and it made such a deep pressure upon each thigh that it almost destroyed the skin, which was blue and looked as though necrosis would certainly occur.

These forceps being longer, it seems to me we would run a still greater risk unless the thighs were widely separated—a position which would be very uncomfortable to assume for two days.

Dr. E. C. DUDLEY: I have had some forceps made which I have used successfully three times in vaginal hysterectomy, and they are shaped in accordance with the suggestion of Dr. Etheridge, the handles being curved to one side in order to prevent them from striking the thigh opposite to the broad ligament in their grasp. The blades are about two or two and a half inches long. The forceps presented by Dr. Byford are open to the objection that the tooth projecting from the end of one blade over the end of the other must increase the difficulty of removal. Besides, this tooth, the object of which is to prevent the upper margin of the broad ligament from slipping out of the grasp, is hardly necessary, inasmuch as this accident is not likely to occur, even with the ordinary forceps, if properly applied. It is a question whether the broad-ligament forceps should not have the grooved teeth parallel with the jaw, instead of at right angles to it, to prevent their slipping off. At least, the parallel arrangement might be observed to within a half inch of the end of the jaw, and throughout this half inch they might be transverse and a little deeper, in order to hold the margin of the ligament. I prefer for this operation that the shank of the forceps be much shorter, because when the handles are short several of them, arrested at the vulva, will hold the broad ligament well down towards the vagina, and thereby continuously prevent its retraction up into the peritoneal cavity, where it would necessarily be a source of danger, because it would draw up with it its necrosing extremity, which is in the grasp of the instrument. I have never left the forceps on longer than seventy-two hours, and have sometimes taken them off in twenty-four hours. It might be well, however, to leave them on as long as they will stay, which would be until the sloughing tissue within their grasp comes off—an occurrence which would certainly be hastened by their pressure. Clearly,

the sooner it comes off the better. Gangrenous tissue in connection with a wound must inevitably be a source of danger. The forceps, moreover, serve the purpose of drainage.

Dr. BYFORD: I have never had the trouble that Dr. Etheridge has had: but I do not know that I ever had them on an unusually fleshy patient. I have never had the forceps cross each other; they always lie parallel outside. I could not very well put another curve in this instrument without destroying the power of the blades. I have found no difficulty whatever while taking them off in my two cases.

Dr. DUDLEY: The next ones I have made I shall have the teeth run in the opposite direction, parallel with the blades.

Dr. BYFORD: I think it would be an improvement to have them run at least diagonally, because of the danger of their slipping off at the sides. As Truax & Co. have just sold the first lot, I shall order the change for the next. As to the length of the forceps, you must have a long handle for leverage; I prefer to have mine stick out from one to two inches from the vulva. It is easier to use the catheter and keep the parts clean, and I should dislike to have traction exerted by short handles, as that would imply pressure upon the external parts and pubic bones, which could not be tolerated for any length of time. Another objection to leaving them in the vagina too long is that they become corroded, and I think in a short time would catch and retain foul secretions. I prefer to take them off in forty-eight hours and commence vaginal douches on the third or fourth day.

Dr. HENRY T. BYFORD exhibited a fibro-cystic tumour of the uterus successfully removed by laparotomy. I have here a tumour which I think is interesting for several reasons. It is a fibro-cystic tumour of the uterus, and was about the size of a seven months' pregnant uterus, of which the solid portion is not larger than the first. I have the following notes:

Mrs. Bessie B., age 28; married; one child fifteen weeks old. Had a small tumour during her pregnancy, first felt over the right iliac region. Tumour felt in connection with

the uterus after labour getting apparently smaller during first month after labour, then growing rapidly. She suffered with a mild form of peritonitis after labour, with most pain in the region of the liver. Since then has been gradually improving in strength. Owing to its first appearance on the right side, its greater prominence to the right when I saw it, the evident fluidity of its contents, and the displacement of as much of the uterus as could be felt to the left, it was thought to be a multilocular ovarian cystoma with adhesions. Operation April 1st, 1889, at Women's Hospital.

The chief item of interest in this specimen was the difficulty of the operation. I cut down upon the tumour and came immediately upon its wall. Expecting to get into the peritoneal cavity I cut down to the symphysis and came on a little peritoneal pocket large enough to contain about half an ounce of fluid. I then went up beyond the umbilicus, but still could not get into the peritoneal cavity. I separated the tumour for quite a distance laterally, but could not determine whether I was between the tumour and the peritoneum or between the peritoneum and the abdominal walls; on one side I seemed to have a different layer of tissue from that on the other. Finally I plunged a trocar into the mass and evacuated about a quart of thin, slimy fluid. When this ceased flowing, I took out the trocar and lifted out with my hand two or three quarts of jelly-like substance. I pulled upon the walls and went on separating them from their beds. When I got to the intestines, I found no peritoneal cavity. They were adherent to the tumour and to each other at every point. What had been omentum apparently came off from its intestinal attachment, leaving spurting arteries on the surfaces. While I was at work, these two smaller cysts broke and smeared the whole field with their tarry fluid. The colon and sigmoid flexure bled profusely upon being separated from the mass. The vermiform appendix, which extended over to the median line, had to be removed. It is still adherent to the tumour and as large as the finger. The only trace of the broad ligament that I got was a little fold sending up, from

each iliac fossa, large vessels. I ligated these folds and then enucleated the tumour out of the broad ligament, tying vessels everywhere, and finally got it loose from both sides. I made a stump of the uterus at about its middle. There was left an enormous raw, oozing surface extending from the bottom of the pelvis almost to the ensiform cartilage and across almost the whole abdomen. The only way I could get the pelvis and crevices free from the small clots and débris was by pouring hot water into the cavity by the pitcherful. The foreign substance came out by the handful. I fixed the stump extra-peritoneally by Hegar's method. I put a drainage tube below in the cul-de-sac and above in the upper end of the incision. The temperature went up to 103° F. and gradually came down. Except that temperature, she did not have a bad symptom. The upper drainage tube came out in a few days; the upper one is still discharging a little, but the patient feels perfectly well and has been wanting to get up for several days.

Dr. DOERING: How long ago was the operation?

Dr. BYFORD: Two weeks yesterday.

Dr. C. T. PARKES: I think Dr. Byford is to be congratulated upon the success of this very difficult operation. It was extremely difficult, and proves the fact that we should all remember that it is not what you take out of the abdominal cavity that causes danger to the patient; it is what is put in or left in, and the care used in washing it out and leaving it perfectly aseptic.

Dr. E. C. DUDLEY: Dr. Jaggard will probably remember a uterine myoma which weighed some thirty-five or forty pounds, at the removal of which he was present, five or six years ago. In that case, at least two square feet of surface were exposed in breaking up the adhesions and enucleating the tumour. The woman never suffered any bad consequences from the exposed surface. Large exposed surfaces in the peritoneal cavity, if clean, are not particularly dangerous.

Dr. C. DUDLEY read the following paper, entitled,—

A Uterine Myoma removed by a combined Vaginal and Abdominal Operation—capsule stitched into the abdominal Wound.

The solid portion of this myoma weighed six pounds. The tumour was taken from a multipara, 38 years of age, referred to me by Dr. Vanderhoff. She was extremely anæmic and weak, having been exsanguined from long-continued and frequent uterine hæmorrhages. The tumour was ovoid and extended from a point near the umbilicus to the vulva, filling the pelvis minor so as to prevent an examination from revealing its relations to the uterus. The fact that the tumour presented at the vulva decided me, in accordance with the old rule, to attack it through the vagina, knowing that if it became impossible to enucleate the entire tumour in this way the remainder might be removed through the abdominal cavity.

The patient being in Sims' position and the parts exposed by Sims' speculum, the capsule was incised, and with some difficulty peeled back, and piece after piece of the tumour was cut off with the scissors, all the time making traction with vulsellum forceps. Presently a cavity in the tumour was entered which contained something like a quart of purulent fluid. I continued the enucleation and removal of the tumour piece by piece for more than an hour, until about one-half of it had been taken away. I could then make out its relations to the uterus. It had sprung from the right wall of the cervix, close to the vagina, and had developed both upward and downward, without involving to any great extent the uterine wall.

It was now apparent that further enucleation in this manner would consume more time than the patient could endure, and might be impossible without rupture of the capsule into the peritoneal cavity and all of the dangers consequent upon such an accident. Accordingly I placed the patient upon the back, and opened the abdomen by an incision perhaps five inches in length. The patient was so weak as to necessitate the most rapid manipulation. The abdominal

portion of the tumour was found to be free from adhesions. I incised the capsule parallel to the abdominal incision, and with considerable difficulty, in about ten minutes enucleated it. The empty capsule was then intact with the exception of its two openings, below in the vagina, and above in the abdominal cavity. The uterus was of about normal size. My first impulse was to remove the capsule together with the uterus, in order to secure absolute hæmostasis. This might have been done by means of the lock forceps in the vagina, as in an ordinary vaginal hysterectomy. Instead, however, I stitched up the abdominal opening of the capsule, including a wide margin of peritoneum, with interrupted catgut sutures, leaving an opening in the summit of the capsule about an inch long. This was stitched into the central part of the abdominal wound, and the remainder of the wound was closed in the usual way, except that the sutures closing the abdominal wound were passed also through the seam in the capsule. The capsule was then irrigated with hot water, which readily passed out through the vagina. A glass drainage tube was introduced through the abdominal wound into the capsule, and antiseptic dressings applied over the abdomen and vulva. Very little blood was lost in the operation.

The patient did remarkably well until about the fourth day, when drainage at the vulva ceased from obliteration of that end of the capsule. Temperature rose to 103.5° ; no chill. Capsule irrigated with corrosive sublimate solution, 1:10,000. Temperature remained high. I then forced a flexible sound from above downward through the capsule into the vagina, breaking up the adhesions between the walls of the capsule. The sound was then withdrawn with a thread which had been tightly tied around its end. A large, perforated rubber drainage tube was now drawn down by means of this thread through the abdominal wound into the vagina, and perfect drainage was thereby secured. Temperature has been much lower, quite within bounds. It is now two weeks since the operation, and the indications are all most favourable.¹

¹ Three weeks after the operation the patient was securely convalescent.

Whenever a myoma can be peeled out of the capsule, the latter may be repaired by means of interrupted catgut sutures and stitched into the wound, as above described. If its inner surface bleeds considerably, an iodoform gauze packing after the method of Mikulicz would be a perfect hæmostatic.¹ In this case a long rubber drainage tube reaching to the vagina should have been used instead of the glass tube, to begin with.

A second thought relative to the management of the capsule in such cases leads me to regret that I did not simply invert the capsule into the vagina and hold it there by means of lock forceps, precisely as the broad ligaments are held after severing the uterus in vaginal hysterectomy.

Occasionally the operator will encounter a case in which he has enucleated a myoma on the abdominal side, the myoma having developed so far down towards the vagina as to permit an opening to be made into the vagina through which the capsule could be inverted.

Dr. ETHERIDGE: Mr. President, I do not see the objection, in the doctor's case, if there was no attachment and the capsule was flexible, of removing it entirely through the abdominal cavity. It seems to me that he has run a great risk in getting it out piecemeal from below, knowing nothing about when he was going to cut across a large vessel. In regard to the possibility of hæmorrhage, it seems to me the operation is unjustifiably dangerous. When we have a movable tumour a very much better way of proceeding is to remove tumour, capsule, and all, and then close the abdominal wound and make free drainage through the vagina, and wash it out as often as necessary. It seems to me Dr. Byford's suggestion would be better than the one Dr. Dudley speaks of for this reason: In turning the capsule down and fastening it with forceps beneath, there is a point at which this thin tissue turned over upon itself will strangle the blood-vessels, so that no circulation can take place through the part of the capsule

¹ Dr. Dudley has since used the iodoform gauze packing of Mikulicz in another similar case.

that is inverted, consequently all that is inverted will stand a good chance of necrosing and being a source of sepsis. I listened very carefully for a description of the advantages of this method over the complete removal through the abdomen, and was disappointed in not hearing it.

Dr. BYFORD : I had the pleasure of witnessing this operation, and it proved a very instructive one to me. The method of operating both ways is not entirely new. There is an operation very similar to this one described by Dr. Zweifel in a recent number of the *Centralblatt für Gynäkologie*. In a case like this, I should prefer to excise as much of the loose capsule as possible, stitch the peritoneal surfaces beyond and draw the edges down to a vaginal opening below. A drainage tube could be kept in from the vagina. As to inverting the capsule, it would have been possible in Dr. Dudley's case, I think, but whether so as not to leave pus pockets on either side I do not know. The method mentioned of inverting the cervix in fibroid tumours has, I believe, been discarded as unfeasible ; the cervix is either too small, or if enlarged, is too hard to be dilated sufficiently. As to fibroid tumours being reproduced from the capsule, I think it is impossible, because the capsule either shrinks up, suppurates, or undergoes necrosis.

Dr. E. C. DUDLEY : If Dr. Etheridge had seen this operation in which the tumour extended down to the vulva, I think he would have been impressed with the fact that this particular tumour could not possibly have been enucleated on the abdominal side without exposing the patient to an unnecessarily long and dangerous operation. The enucleation might have extended further than the finger could reach. The previous removal of a large part of the tumour through the vagina made it possible to remove the remainder through the abdomen very rapidly. I do not think inverting the capsule and drawing it down into the vagina would cause sloughing, if one were careful not to make that amount of traction which would cut off circulation and thereby produce sloughing.

Dr. Byford's suggestion as to the treatment of the capsule differs from mine rather in detail than in principle.

AMERICAN JOURNAL OF OBSTETRICS.

The Non-retention of Urine in Young Girls and Women.

By H. MARION SIMS, M.D., New York.

The title of this article would seem to indicate the non-retention of urine in females from no matter what cause, but such is not my intention. I wish to include under its head those cases of obstinate non-retention due to other causes than cystitis and growths in the bladder.

Of all the diseases that flesh is heir to, I do not suppose there is any one more disagreeable, harder to cure, or more demoralising to the patient than a disease of the bladder which calls for a constant evacuation of that organ.

The particular object of this paper is to call attention to a class of disease which seems to be especially predominant in young girls from infancy up to maturity, and, also, in some women of maturer years, when it is perhaps a sequel to cystitis; or the result of a not over-watchful mother in infancy, when force of habit becomes second nature; or follows a paralysis of the sphincter muscle. The disease I allude to is the gradual contraction of the walls of the bladder, due to a hypertrophy of the muscular coat, and the consequent reduction of its holding capacity to little or nothing. It has been my fortune to see quite a number of these cases, both in children and adults, and I have had the satisfaction of curing all but two of my cases completely, and that with no other aid than forcible dilatation by warm water. I do not propose to enter into the pathology of these cases, but simply give short histories, with the results which followed.

Nearly eight years ago, a young lady, daughter of a large banker in a neighbouring State, was brought to me for my opinion as to her case. This was her history: She was then seventeen years of age; her menstruation was perfectly regular and free from pain, and her general health was all that could be desired. Her only complaint was that she had never been able to hold her water for more than fifteen minutes during

the day ; and at night, when asleep, she had no control whatever of the bladder, the water constantly running out as fast as secreted. She had never known what it was not to wake up in the morning and find herself drenched with urine since she was two years old. She had to lead a rather secluded life ; never could accept invitations to spend the night with her friends, as most young ladies do ; and if she and her mother ever made a trip to this city or elsewhere, they always had to go armed with rubber sheets and their own cotton sheets to put on the hotel beds, so that this poor girl's infirmity should not be found out by the chambermaids. Can anything more distressing be imagined for a young lady of seventeen years of age ? I doubt it very much. Such was her history. She had been the rounds of doctors, both in Philadelphia and this city, and had taken every known remedy for her condition, continuing their use for months at a time, but all to no purpose. This made me doubly anxious to relieve her. I first suggested an examination, which was readily agreed to. On account of her age and sensitiveness I administered nitrous oxide gas and made a thorough examination of the pelvic organs and bladder. The former were in a perfectly normal condition, but I was rather astonished to find that the bladder measured only two and three-quarter inches from the meatus externus to its posterior wall. It was free from any foreign body, but I could feel the uneven, ridged surface of the lining of the bladder, as if one fold of mucous membrane were lapped over another. As there was no history of any actual disease present, I could see but one conclusion to arrive at, and that was, that this was a case of "infantile neglect" to properly empty the bladder when Nature demanded. This continued neglect of Nature's calls resulted in the bladder becoming so reduced in size and capacity that in time it was so contracted that it could scarcely retain any water at all. During the day the patient could tell when the bladder was full and so empty it. This condition would bring about a partial paralysis of the sphincter vesicæ muscle, and consequently when the patient went to sleep at night this "small"

bladder would fill up and overflow, and so keep her "in a pool of water constantly," to use her very words. The thought came to me at that time "that if I could only increase the capacity of the bladder sufficiently to hold the water secreted during the night, the patient would be cured." I had never heard or read, at that time, of the forcible dilatation of the bladder for the cure of such a case, though, of course, I was familiar with the washing-out of the bladder for cystitis, &c.; so I determined to stretch the folds of the coats of this bladder so it would be capable of containing more water. All I used was a silver catheter with a small rubber tube connected with it, and to this was attached a Davidson's syringe. The quantity injected could easily be measured by knowing that the bulb of the Davidson's syringe, when emptied completely, throws into the bladder exactly one ounce of water. The water used was just "comfortably warm." At the first attempt at dilatation, all the bladder would hold was one and three-quarter ounces. The washing was continued every day, each day getting into the bladder just a little more than the day before. The force used by me was sometimes, to the patient, "unbearable," and certainly very painful. But when a patient is anxious to get well, and is encouraged to bear "just a little more water" by the doctor, the progress made is sometimes most gratifying. The amount of water used in this case was increased at the rate of half an ounce to an ounce a day at times, and then again it would be some days before any further impression could be made. At the end of two months' treatment, this patient's bladder would hold twelve ounces of water, and for the first time in her life she awoke in a dry bed in the morning. From this on, the capacity of the bladder was gradually increased by the forcible dilatation until it would hold eighteen ounces of water, and that without very severe pain. The patient, as the capacity of the bladder increased, would only have occasional involuntary escape of the urine, at night. This became gradually less and less frequent until she was discharged, cured, and a most happy woman. The treatment had lasted in this case three months. I see

her now from time to time, and she reports that she has never had the slightest return of her old trouble.

I was more than happy to be able to relieve this poor girl of her terrible affliction by what I then thought to be an entirely original plan of treatment.

This forcible treatment is sometimes most painful, especially at the beginning, and the patient must needs have a goodly amount of courage to go through with it. In connection with the dilatation, I have sometimes had recourse to a mild faradic current, applied directly to the neck of the bladder by means of a Simpson sound connected with the battery. This sometimes helps to restore "tone" to the sphincter vesicæ muscle. The forcible dilatation should be used daily until there is a very marked improvement in the retaining capacity of the bladder. Then it can be done every second day for a month; later on twice a week; and finally only once a week until the final discharge of the patient. In all these cases so treated by me, I have never had to give any medicine other than tonics, or perhaps some mild nervine from time to time, as the symptoms would demand. As a rule, each case had been through a most thorough course of medical treatment, but without the least benefit.

I have said that at the time I treated the case just related, I was certain I had struck an original idea, for I did not remember then of ever having heard of a case of "contraction" of the bladder treated in a similar manner. In looking up the literature of the subject, I find very little mentioned in regard to such cases, and only one case could I find reported where the incontinence was cured by forcible dilatation. This case was in a girl, after puberty, whom Braxton Hicks had cured "by mechanical dilatation with warm water," but in what quantities, I could not find out. Dr. Skene speaks of "forcibly washing out the bladder, distending it a little more each time," as being "well spoken of." Sir Henry Thompson, Ultzman, and Winckel all speak of washing the bladder in cystitis, but only employ small quantities of water, from sixty to three hundred grammes. Baker (of Boston) washes out the

bladder for *cystitis*, the quantity being governed by the patient's feelings. This he repeats from two to four times a day with a saline solution, but for *cleansing* purposes only.

In some cases of incontinence, Ultzman recommends catheterisation every three or four hours to relieve the sphincter vesicæ from action. Baker also recommends sea baths, diet, change of air, and tonics. Fritsch has cured some cases of incontinence by narrowing the vagina just below the sphincter vesicæ muscle. Dr. Clinton Cushing, in the *Pacific Medical and Surgical Journal* for March, 1882, says: "There is another element in cystitis as a consequence of intolerance of urine, which is persistent contraction and hypertrophy of the muscular coat. Injections are recommended, but never more than can be borne without pain." In the treatment of enuresis in children and adults, I find no mention of dilatation among the many remedies given.

I only give the above few references just to show that there is no mention made of contraction and hypertrophy and its treatment by forcible dilatation, except the one case given by Braxton Hicks. All the other cases are spoken of in incontinence of urine due to cystitis, and, of course, we are all most familiar with the recognised treatment of cystitis by washing out the bladder.

Before finishing, I wish to mention briefly a few cases treated in the same manner as the first case, and with the same happy result.

The second case coming under my care was a young lady from Ohio, a Jewess, who had been unable to retain her water at night for years. She was then eighteen years old and engaged to be married. This fact made her all the more courageous in undergoing the painful treatment. The urine showed no abnormal conditions. Her general health was perfect in every way. But just as soon as she would go to sleep at night, the water would begin to dribble away and keep up all night long. Her bladder was very much contracted, and at the first treatment I only succeeded in injecting a little over an ounce of water, the following day just a little

more, and so on until I could get in six ounces very easily. To stretch the bladder from a six to a twelve-ounce capacity took nearly eight weeks, and required a vast deal of patience, and considerable pluck and forbearance on the part of the patient. At twelve ounces she began to hold the urine all night. (Very little water should be left in the bladder after each treatment. As soon as the limit is reached, the water should be allowed to escape from the bladder through the catheter at once.) As soon as the twenty-ounce limit was reached, I allowed her to go home; she was married shortly after. I heard from her three years after her discharge. She was perfectly well, and the mother of a boy.

My third case was a little school-girl of this city, also a Jewess. She was thirteen years old and had never menstruated. She had been in the habit of "wetting her bed" ever since early childhood. Her mother used to punish her, to try and break her of the habit, but all to no purpose. From the meatus externus to the posterior wall of the bladder in this case the measurement was only two inches. The same condition existed as in the other cases. The bladder would hold only three-quarters of an ounce of water at the first treatment. This was gradually increased until ten ounces were reached. Then she began to hold her water for almost the first time in her life. This case was very tedious and slow, and the poor child showed a great deal of perseverance. It took five months to effect a cure, and when I discharged her she was perfectly well and could easily hold eighteen ounces of water in her bladder.

I had two other cases in young girls, like the foregoing, with histories almost identical and treatment the same, with the same satisfactory result, so I will not give them.

The next most interesting case was in a woman over fifty years of age, who had had several children and was a grandmother. Some years previous to her consulting me, which was three years ago, she had a violent attack of cystitis. This had been relieved by the usual treatment for that disease, but it left the bladder in such an irritable, contracted condition

that she could not hold her water more than a few minutes during the day, and at night she had to get up to empty her bladder as many as thirty times. This had gone on for some years, and, as a consequence, the poor woman was much run down in health, tired and exhausted from want of sleep and rest. She had submitted to all sorts of treatment without benefit. The urine was free from pus, and her health was good with the exception of this hypertrophic condition of the bladder. One ounce of water was all the bladder would hold to start with. In this case I used a saturated solution of boracic acid and water in place of plain warm water. I did this because she had had cystitis. The bladder yielded to stretching quite rapidly in this case, and from day to day she reported less frequent rising at night, more sleep, and improvement in every way. In four weeks' time she had to rise only six times instead of thirty as before, and her bladder held twelve ounces of water instead of one ounce as at the beginning. She was under treatment three months, and at the end of that time her bladder held twenty-two ounces of water without difficulty, and she could go for six hours at a stretch without passing her water. She was then discharged as cured. A few months ago I heard from her, and she was perfectly well still.

In the two cases in which I failed to give relief, I was obliged to resort to the making of a vesico-vaginal fistula. I have had other cases which have been successfully treated, but those I have detailed are a few of the more interesting ones.

THE MONTREAL MEDICAL JOURNAL.

Gynecological cases.

Under care of Dr. ALLOWAY. (Reported by Dr. LOWE.)

CASE I.—*Divulsion with Incision.* Aged 34; complains of bearing-down pain in both groins, weakness in the back, and at times aching in left leg and thigh; severe dysmenorrhœa.

These pains have lasted four or five years, and followed an exposure to cold during a menstrual period. *History*—Menses began at 15; always regular, lasting four or five days, painful during first two days. Married five years; no children.

Examination.—Uterus anteflexed, cervix elongated, and canal stenosed.

June 4th.—Dr. Alloway forcibly dilated to $1\frac{1}{4}$ inches, excised a V-shaped piece out of the posterior segment of the cervix, sutured the edges of the raw surface together, and inserted a wire dilator. *6th*.—Doing very well. *10th*.—Menstruated without pain. *15th*.—Sutures removed to-day, also the dilator. *17th*.—Discharged.

[The operation of divulsion with steel dilators, followed by excision of a V-shaped piece from posterior segment of cervix, is often followed by the very best results, especially in relieving menstrual pain.—T. J. A.]

CASE II.—*Trachelorrhaphy*. Aged 34; admitted May 20th, 1889, complaining of frequent and somewhat painful micturition, pelvic and lumbar pain; sense of constriction about the epigastrium and a feeling as if a ball were rising out of her stomach; leucorrhœa and scanty menstruation. About three years ago she had an attack of acute cystitis, and for two days had complete retention of urine. Her bladder trouble has existed more or less ever since.

History.—Menses began at 15; has been irregular for the last seven years, especially during last year; married at 23; had one full term pregnancy; labour difficult, but not instrumental; two miscarriages at three months, last one seven years ago. From this patient dates all her troubles.

Examination.—Bilateral laceration of cervix, with much glandular hypertrophy and ectropion.

May 31st.—Dr. Alloway performed an Emmet's trachelorrhaphy to-day.

June 1st.—Patient has some headache and neuralgic pains in side and back; painted with iodine. *4th*.—Improving; pains relieved. *6th*.—Still improving. *9th*.—Sutures removed. *10th*.—Sat up in bed to-day. *20th*.—Discharged.

CASE III.—*Curetting followed by gauze pressure.* Aged 22; admitted June 2, 1889, complaining of discharge of blood-clots from vagina and bearing-down pain in pelvis. About three months ago, at third month of pregnancy, she was frightened by a horse falling down in the street, and that night she noticed blood coming from vagina. This continued for about three weeks. In the meantime she continued at her housework. Bleeding has been continuous ever since, with intermissions of one or two days. Flow has always been accompanied by bearing-down pain in back and loins.

History.—Menses began at 14; always irregular, sometimes every three weeks and sometimes every two weeks; have always been profuse and sometimes painful, especially before the flow. Married six years; three pregnancies, two to full term and one at third month. Last pregnancy two years ago.

Examination.—Found uterus much enlarged, retroverted and tender; cervix lacerated bilaterally.

June 4th.—Dr. Alloway curetted a large amount of membranous tissue from interior of uterus and packed the cavity with iodoform gauze. *5th.*—Patient doing well; temperature normal; slight reddish discharge from vagina. *6th.*—Packing removed from uterus; ordered hot douches of 1 to 60 carbolic solution. *10th.*—Patient has continued to improve; discharges diminishing. *20th.*—Patient left the hospital to-day feeling quite well.

[In this case, which was one of the glandular variety of endometritis with almost constant bleeding, I adopted Vulliet's method of packing the uterine cavity with iodoform gauze after thorough curetting with the sharp instrument. If this method is carried out properly and the packing allowed to remain *in situ* for four or five days, I think better results can be obtained in such cases than from the method of injecting the cavity of the uterus with iodised phenol. It is also, I think, a safer method of dealing with them, the gauze ensuring more perfect drainage. In this case it proved most satisfactory.—T. J. A.]

CASE IV.—*Recto-Vaginal Fistula.* Aged 32; admitted June 2nd, 1889, complaining of pain in interscapular and lumbar region; bearing-down pain in pelvis; burning pain in vagina; leucorrhœa. These symptoms have lasted more or less since the birth of her first child, about four years ago.

History.—Menses began at 18; always regular, never painful until after marriage. Married six years; two pregnancies at full term labours natural: last labour one year ago.

Examination.—Found large recto-vaginal fistula; cervix lacerated; uterus enlarged and hard.

June 10th.—Emmet's operation on the cervix and Tait's flap-splitting perineorrhaphy were performed by Dr. Alloway, and the vagina packed with iodoform gauze. *14th.*—Patient doing well. *19th.*—Allowed up to-day. *21st.*—Patient has been up and walking about the ward ever since; fistula completely closed. Discharged to-day. *27th.*—Sutures removed from the cervix to-day; union good.

[This was a very interesting case regarding the rarity of recto-vaginal fistulæ of this nature. A full description of the case can be read in the July number of this *Journal* embodied in a clinical lecture delivered at the hospital.—T. J. A.]

CASE V.—*Trachelorrhaphy.* Aged 26; admitted June 7th, 1889, complaining of continuous and profuse bloody discharge from vagina with very foetid odour; pain in right inguinal and hypogastric regions; sensation as of a lump falling down in rectum, which seems to partially occlude the vagina. The discharge has lasted about six months, the pain about three months. Pain began during a menstrual period and has remained constant ever since. She continued at her work till the pain became so severe that she had to come to hospital.

History.—Married nine years; two pregnancies to full term; labours were easy, last one six years ago.

Examination.—Extensive bilateral laceration of cervix, with considerable hypertrophy and ectropion.

Emmet's operation on the cervix was performed on the 10th June by Dr. Alloway.

June 17th.—Sutures removed.

July 6th.—Discharged to-day quite well.

CASE VI.—*Curetting for Menorrhagia.* Aged 46; admitted June 17th, 1889, complaining of profuse flooding. About a week after her last regular period she noticed a slight bloody discharge coming from vagina. This discharge continued, but was slight until about eight days ago, when it became very profuse. Before this attack came on she had severe bearing-down pain, but since the flow has had little or no pain. At present blood comes in gushes and large masses of clot along with it.

History.—Menses began at 14; always regular but painful before marriage. Married eleven years; ten pregnancies, eight to full term and two at third month; labours easy. First miscarriage about twelve years ago; had severe flooding following it. Has had an attack of flooding every year for the last nine years, but at present it is more profuse than ever.

Examination.—Slight bilateral laceration with ectropion.

June 19th.—Dr. Alloway curetted uterus and filled cavity with iodoform gauze. *22nd.*—Iodoform gauze removed, free from odour. *24th.*—No discharge to-day; patient feels well.

July 1st.—Discharged, quite well.

Patient came back about a week later saying discharge was as profuse as ever, and had commenced the day after she left the hospital. The uterus was injected with iodised phenol. Patient reported several days later that discharge was gradually lessening.

[This case left the hospital much too soon, which accounted for the return of the discharge. The injection of iodised phenol undoubtedly arrested it for the time, which it always will do, but if she had had sufficient rest after the curetting the bleeding would not have returned abnormally. —T. J. A.]

CASE VII.—Aged 53; admitted June 14th, 1889, complaining of profuse and over-frequent menstruation, and frequent and painful micturition.

Examination.—Chronic metritis and endometritis; right

uni-lateral laceration with extensive hypertrophy and cystic degeneration of cervical glands; retroversion of uterus, and lacerated perineum.

June 17th.—Schroeder's operation on the cervix, Tait's flap-splitting operation on the perineum, and Alexander's operation to shorten the round ligaments were performed by Dr. Alloway at one sitting.

July 1st.—Perineal sutures removed; union good. *3rd.*—Sutures removed from abdominal wound to-day; union perfect. *9th.*—Patient has continued to improve; sat up in bed to-day for the first time. *12th.*—Walked round the ward a little to-day. *21st.*—Discharged to-day feeling well and free from feelings of discomfort. Vaginal examination with patient in erect posture, found uterus anteverted and high up in the pelvis.

[The bladder irritability must have been due to traction upon it by the retroverted uterus, in sustaining the weight of the intra-abdominal pressure. When the uterus was brought forward and elevated on the pelvis, the pressure passed behind the uterus and the bladder was no longer influenced. It will be noticed in this case that the three operations were done at the one sitting in about an hour and a quarter. This is not by any means a difficult procedure, and should always be done when necessary in preference to subjecting the patient to a second etherisation and invalidism.—T. J. A.]

NOTES.

The Provincial Medical Journal of England, in an editorial relating to the British Gynæcological Society, pays a very high and well deserved compliment to the Society in question, and incidentally to American gynæcology and dentistry. "We write with regret," says the editor, "that the Americans are ahead of us in dentistry and in gynæcology. The reason is that gynæcology was separated from obstetrics, and its study put on a proper basis. Excellent handbooks, as those of Thompson, Mundé, Goodell, have been published and are to be found in every practitioner's library in the States. The Americans took up the study with all the energy of a young people, and we are simply following in their wake, and attempting to interest general practitioners in a branch of practice which is the most important one to them. There is always a little difficulty in launching out a new society. Even in the practice of medicine there are jealousies, but the British Gynæcological Society had even less difficulty than was anticipated. It evidently met a want; hence its hundreds of members; hence the success of its meetings and its transactions. Opposition and competition are excellent things; they stimulate to action; and the best thing for the British Gynæcological Society would be personal antagonism, as we feel sure it would stir up those who are interested in it to make it a still greater success."

The Provincial Medical Journal evidently has considerable fighting blood in its veins; but if inclined to be aggressive it is certainly just and candid, both in regard to the British Gynæcological Society and to American gynæcology and dentistry. We Americans are certainly very much interested in the British Gynæcological Society, for it has ever shown since its foundation an amount of enterprise that is really quite American! An outgrowth of the Obstetrical Society of London, it had its beginning in 1885, since when the accessions to his membership have been extremely rapid, while the character of its work has been the very best. By the Obstetrical Society it was regarded, at first, as simply a little rabble of fanatics blindly running after their leader, Tait. Three years ago an American

in London was informed, by one of the most prominent obstetricians of England, that he could not possibly promote his interests either in England or in America by joining such a society as this one. To-day the British Gynæcological Society has a large number of members in this country who take a very cordial interest in the work being done by the Society, many of whose home members, such as Tait, Bantock and Barnes, are well known by us not only from their published works, but from visits made us. We are little concerned in the rivalry between Sir Spencer Wells and Mr. Tait. Even if it be true that Tait's eminence made easy the establishment of a new society in which Americans at once took a great interest, we find no evidence of weak idolatry in the members. The Obstetrical Society decries its rival "because its members remove too many ovaries." After all, each one will have to decide such matters for himself. We admire Wells and we admire Tait, and we do not believe that the former is the Obstetrical Society, or the latter the Gynæcological Society. Each has had rich experience which we who are interested in operative gynæcology will do well to carefully study. Meanwhile we find that the British Gynæcological Society is doing more to make its work known abroad than is any other special society in England.

—*Jour. of the Amer. Med. Assoc.*

WE learn that Dr. P. Mérière has retired from practice on account of failing health, and that Dr. Phillippeau succeeds him as editor of the *Gazette de Gynécologie*.

WE are glad to be able to state that on January 1st, 1890, the British Gynæcological Society will take possession of its new rooms at 20, Hanover Square. The room intended for the library is eminently adapted for the purpose, and overlooks the gardens in the Square. In future the meetings of the Society will also be held at 20, Hanover Square. The large and valuable collection of books belonging to the Society will now be at hand and available by the Fellows. The Library will be opened daily for the use of Fellows as a reading and writing room. The rapid growth and success of the British Gynæcological Society had rendered it necessary some time back for the Council to consider the advisability of securing more ample accommodation.

IN consequence of his seven years' term of office being nearly completed Dr. Macan will shortly vacate the mastership of the

Rotunda Hospital, and an election for his successor will take place in a couple of weeks. There are numerous candidates for the post, the emoluments of which are about £1,000 a year, and the appointment is tenable for seven years. It is generally believed that Dr. W. J. Smyly will be selected. The mastership of the Coombe Lying-in Hospital will also shortly be vacant, and it is expected that the appointment will lie between Mr. Colclough Hoey and Dr. F. Kidd, both having acted as assistant masters to the institution.

DR. MURDOCH CAMERON, obstetric physician to the Glasgow Maternity Hospital, has added a third successful case to his list of Cæsarian sections. The patient was rachitic, about 48 in. in height and was sent from a neighbouring town, after being two days in labour. The operation was performed on Oct. 8th. The mother and child (female) are both doing well.

DR. PETER HORROCKS performed Cæsarian section by Säger's method on Monday, Oct. 21st, at Guy's Hospital. Both mother and child are progressing favourably.

THERE is no necessity for fresh testimony as to the hygienic properties of the various Pine Extractives, nor as to the special excellence with which these products have been made available for medicinal purposes by Messrs. G. & G. Stern. Those engaged in other specialties than ours have fully proved, for example, the usefulness of the Pumiline Jujubes in throat and pulmonary affections, and of the Pumiline Essence and Extract for baths in rheumatism. But we should like to direct the attention of gynecologists to the great comfort derived from the use of Pumiline Ointment, not only for external applications in cases of eczema and vulvar irritability from other causes, but also for making digital examinations. We have tried it extensively, and have been more than satisfied with the result in both matters. For cleansing the hands we have also met with few articles so satisfactory and pleasant as the Pumiline Soap. For this latter indeed we confidently predict a considerable consumption, for its great purity and low price, combined with its unusual utility in the direction we have indicated, should make it a great favourite with surgeons generally, and all engaged in obstetric and gynecological work in particular. We can heartily congratulate Messrs. G. & G. Stern on their most excellent and useful preparations.

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THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, NOVEMBER 13, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT: 27 Fellows, 5 Visitors.

The following was elected a Fellow of the Society :—Dr. T. K. Naumann. The following was proposed for election :—Dr. Edgar Duke, St. Leonard's.

Dr. SPANTON showed some renal calculi which he had removed from a woman aged 23, under his care. The patient had complained of pain and discomfort in the left loin some three years since, for which she had been treated. Nothing further transpired for a year, but about two years ago it was noticed that her urine contained a considerable amount of lithates and this was associated with some increase in the pain and a little swelling in the left loin. Nothing whatever was noticed on the right side. The swelling on the left side gradually increased in size, and she was on three occasions admitted into the Manchester Clinical Hospital, where she stayed for a time, and then left without anything being done. At the end of three years the swelling reached to the umbilicus on the left side and down as far as the iliac crest. It was fluctuating, elastic, and evidently contained fluid. She

was in great discomfort and was unable to get about. The urine contained about a twentieth of albumen. Sp. gr., 1.025. Though thin, the general condition of the patient was fairly good. He cut down on the swelling in the left loin, aspirated and withdrew half a pint of thick urine similar to what she had been passing. He then enlarged the opening and introduced the finger, letting out one and a-half pints of thickish urine, and then he came down on the cavities in the pelvis of the kidney. He showed a calculus which was firmly impacted in the ureter on the left side and very difficult to remove, requiring to be crushed before removal with forceps. It weighed 180 grains. For a week or ten days the patient did well, passing from sixteen to sixty ounces of urine by the urethra every day, and large quantities also escaped from the loin wound in the loin. Then she began to go wrong, feeling sick, but there were no uræmic convulsions, nor coma, nor delirium, and a couple of days later she died. From first to last nothing had been complained of on the right side, and although an examination was made on that side while she was under chloroform it failed to show that anything was wrong. After death they found that the right kidney was practically gone, being represented only by a mere shell. The ureter was completely blocked and a number of calculi were found in it. He remarked on the fact that the calculi, though contained in a cavity which would hold at least a pint of liquid, were rounded off just as they might have been in the bladder. How the ureter should have become blocked and how this state of things went on he could not tell. He observed that it was impossible not to feel that, had the patient been operated on when she first applied for assistance, the result might have been different.

Dr. HEYWOOD SMITH asked whether it was not a common experience to find calculous formations on both sides at the same time. He remembered a case which occurred twenty years ago. There was enormous abdominal tumour, extremely difficult to diagnose, but it was thought to be ovarian. At the suggestion of Mr. Thornton he aspirated and withdrew six

ounces of thin urinous fluid, immediately after which the patient sank and died. After death both kidneys were found enormously distended, the walls not being thicker than a sheet of paper, and each pelvis blocked with a large rough calculus.

Mr. BOWREMAN JESSETT asked whether pus was found in the urine, because he said the fact possessed interest in view of a case at present under his care. A woman came to him five years ago with a large tumour on the right side which was diagnosed to be an enlarged kidney, probably a case of pyonephrosis. She was kept in the hospital for some time, but refused to undergo any operation, and the tumour disappeared. She came back again at the end of four years with complete suppression of urine and the tumour on the right side had completely disappeared, but another tumour was now present on the left side. She came on the Wednesday with a history of not having passed any urine since the preceding Monday. She was placed under observation to see if this was really the case and a catheter was passed into the bladder, but no urine was found. At the expiration of from eighteen to twenty hours he cut down on the left loin and let out a large quantity of urine and pus, but he could find no stone. There was a huge cavity which he drained in the usual way, and about a week after a stone the size of a bean escaped through the wound. She again began to pass water by the bladder and rapidly got well, and left the hospital, the wound in the loin healing. Nothing more was heard of her until three weeks ago, when she was again admitted with another attack of complete suppression and tumour in the left side. He opened up the left kidney once more, and let out a quantity of urine and pus, but could find no stone, although he examined the pelvis very carefully and passed a sound down the ureter to see if a stone was impacted there. He drained as before, and so far, the patient was doing very well. The specimen which had been shown them rather opened his eyes as to the reason of his not detecting the stone in the first instance, for the stone there

was tucked away behind a sort of partition in such a way as easily to escape recognition. He supposed that his patient had a small calculus impacted in the ureter somewhere. She had passed a small quantity of urine since the operation, but not very much. The patient made a good recovery.

Dr. OLIVER, alluding to the age of Dr. Spanton's patient, and the developmental connection between the genital and the urinary apparatus, asked whether there had been any interference with the menstrual function. He said he had seen menorrhagia in many of those cases which he attributed to sympathetic irritation.

Mr. JESSETT added that in his case the other kidney he supposed to be atrophied to such an extent as to render the removal of the left organ quite unjustifiable.

Dr. SPANTON, in reply, said there was very little pus in the urine. He had experienced the same difficulty with the stone as Mr. Jessett, it being encysted. He should have remarked that although the patient had not lived with her husband for two years yet for twelve months previously there had been complete amenorrhœa.

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Case of Gall Stones in a Man.

Mr. LAWSON TAIT said he had an extremely interesting specimen, although it was hardly gynæcological. The patient, however, occupied a very prominent position in the profession in New York, and his father was one of the best known gynæcologists in that country. The patient was forty years of age and a fine specimen of humanity. Ever since twenty-eight years of age he had suffered from gall stones. He had constant pain, and the movement of the carriage when driving on his round would bring on a violent paroxysm. Nothing would relieve this pain but morphia, and for years hypodermic injections had been indispensable. Pain of some kind was almost constant, and at times it became agonising, with transient attacks of jaundice. The explanation was to be

found in the presence of the three big gall stones in his gall bladder which he handed round, together with hundreds of small stones. The patient had come over to him expressly for the purpose of having this operation performed, and that very morning he had cut down on the gall bladder, and removed the calculi, which he produced.

Dr. BEDFORD FENWICK said the specimen he now showed was not only interesting, but rare. The patient, two years before, had consulted him, complaining of pain in the back. On examination she was found to have a congested cervix with suspicious pouting points on the anterior lip. This was the more significant, inasmuch as her sister had died of cancer of the cervix. The "pouting" rapidly enlarged, and finally, in September, 1888, they cauterised and curetted the cervix. It looked very well for about six months, and then the disease returned. The tissues became friable and broke down on the slightest touch, and there was always a discharge of blood after coitus. Upon examination both lips of the cervix were distinctly epitheliomatous and they decided to take off the cervix above its insertion into the vagina, by means of the *écraseur*. The second operation was performed in March of this year, and since then nothing was seen of the patient until November 2nd. She was now found to be undoubtedly pregnant, but even after instituting a careful examination he had not been able to find any opening into the uterus. She was two months gone, and was extremely emaciated, this condition being accounted for by constant vomiting. As all the vaginal cervix had been removed this vomiting was interesting, in relation to the old hypothesis that it was disease of the cervix that set up the vomiting. The pulse was 120; temperature 100°; and there was a condition of general exhaustion. He had consulted with Dr. R. T. Smith, and they decided to endeavour to induce labour, but when they tried to find an orifice of some kind into which to push the tent they failed to discover the slightest trace of an opening. He mentioned that the uterus was drawn up to such an extent as to render the vagina very tense, and during

the fits of retching there seemed a great possibility of the occurrence of rupture of the vaginal roof. Under the circumstances they thought it would be best to remove the uterus, and accordingly the ordinary operation of hysterectomy was performed, and the specimen showed the condition of things very well. The pulse, which was 120 before the operation, fell at once to ninety, and then to sixty-eight. The temperature had not exceeded 99° since the operation. The retching stopped as soon as the patient recovered from the anæsthetic, and she appeared likely to make a good recovery.

Dr. EDIS asked how a stump had been secured to check the hæmorrhage.

Dr. FENWICK, in reply, said that, whatever it looked like, it was the upper two-thirds of the uterus, but retraction of the muscle wall had shelled out the ovum.

Mr. LAWSON TAIT entirely approved of the treatment. He did not see what else could be done. Such cases as those put a man on his mettle in deciding what to do.

Dr. OLIVER asked whether any part of the cervix had been left in the stomach. If a portion had been left he did not see why the disease should not recur. He asked also whether any attempt had been made to push down the uterus from above by the bi-manual method. The amputation of the cervix by means of the *écraseur* was not the recognised way and under these circumstances it was not difficult to understand why no opening had been found.

Dr. JAPP SINCLAIR remarked that total extirpation would have been the best course while the uterus was still movable. The operation of removing the cervix was very simple by ordinary amputation, and was much more satisfactory than by means of the *écraseur*. From what he had seen he did not think that the use of the *écraseur* on the uterus was justifiable. The only really safe and reliable treatment, when they were sure that they had to deal with a case of carcinoma, was total extirpation. The patient would have recovered from that as easily as she had done from the other operation.

Dr. HEYWOOD SMITH asked why the operation had not been done when the presence of a proliferating growth was first noticed, also why the uterus was dragged down. Would it not have been advisable to cut an opening through the cervix before proceeding to remove the upper half of the fundus of the uterus?

Mr. TAIT asked Dr. Sinclair to explain his grounds for asserting that vaginal extirpation was so very safe as an operation.

Dr. SINCLAIR said he would endeavour to make the relative merits of the two operations the subject of a paper later on.

Dr. FANCOURT BARNES said that it was difficult from the specimen to imagine that the contracted uterus had ever held the ovum. He had, however, remarked after Porro's operation, how very rapidly the uterus underwent contraction. What ten minutes before was a soft thin bag, containing the foetus and liquor amnii, had shrunk up almost to nothing, as in the specimen. He said the specimen was very instructive from this point of view, and explained why the Cæsarian operation was so safe.

Dr. BARNES said he did not gather from the paper what steps had been taken to verify the diagnosis of cancer. He mentioned a case which he had seen in conjunction with several well-known gynaecologists, of a lady who, in the sixth month of gestation, was stated to be suffering from carcinoma of the cervix, and the question of amputation of the cervix or some more serious operation was taken into consideration. Dr. Barnes dissented from this opinion; the operation was given up, and the lady survives in good health, a happy mother. He had given special attention to the subject, and he had observed that in some women the cervix underwent a curious condition of hyperplasia, rapid, epithelial shedding, and associated with that was a foetid secretion resembling that of cancer. In another case in the East End, he had amputated the cervix for what was undoubtedly malignant disease. She had three children after that and ultimately succumbed to the

disease. There the labour took place through an opening, not in the true cervix, for that had been removed, but through an incision that was made. He asked why something of the kind had not been attempted in Dr. Fenwick's case. While he congratulated Dr. Fenwick on the result of the operation, he himself would have tried the other plan first.

Dr. BURFORD raised the question of the patient's prospects of immunity. He understood that a portion of the cervix had been left in the abdomen, and the tendency of the disease to spread was well known. He urged that vaginal hysterectomy would have been a much more satisfactory operation as regarded the future of the patient. He asked how much of the uterus it was supposed had been left, and what it was proposed to do in case of a return of the growth.

Dr. HEYWOOD SMITH said that Dr. Barnes had seen a case with him some time since, in which the appearances of carcinoma were very closely simulated.

Mr. TAIT said he had removed the cervix in cases which looked like cancer without any return of the disease.

Dr. RUTHERFOORD thought that the uterus in Dr. Fenwick's case had been removed on a level with the Fallopian tubes and he asked him whether he had taken into consideration the propriety of removal of the uterus *per vaginam*.

Dr. CHAPMAN GRIGG said he was quite unable to understand how it was that no opening could be discovered into the cervix. He alluded to two cases, one of them at Queen Charlotte's Hospital, in which the whole of the cervix was driven outside during labour. They examined the os most carefully, and still they could not discover any trace of an opening. They touched the stretched uterine wall with a knife and in a very few minutes the child was born. Not long since he saw a case which he had formerly treated at the Soho Hospital, in which nitrate of silver had been employed and had caused atresia. There was a large accumulation of menstrual fluid behind, but though they examined very carefully with a speculum, no opening could be found. He, therefore, pushed a sound through the wall and immediately the fluid

escaped. He then further dilated the opening, and the patient got perfectly well. He mentioned incidentally that the introduction of the sound was not necessarily attended with danger to the progress of pregnancy. He thought it was a pity to render it impossible for these unfortunate women to have children when it was possible to do otherwise.

Dr. BEDFORD FENWICK, in reply, said he did not push the uterus down by the bi-manual method because he wished to get it up through the abdominal wall. He did not remove the entire uterus when the disease was first noticed because the husband absolutely refused to allow it to be done. They did not make a new opening into the cervix because there was none left to cut into. There was only a puckered scar in the roof of the vagina. In the last operation, he said they had gone down to the junction of the upper two-thirds with the lower third, though from the contraction of the specimen that appeared not to be the case. They had gone far below the level of the Fallopian tubes. The right ovary was imbedded in a mass of adhesions and was left, but the left ovary was removed with the uterus. They had done their best under trying circumstances, and the woman appeared likely to recover. In reply to Dr. Grigg's remark as to depriving the woman of a chance of having children, he mentioned that the patient had already had about a dozen, and could probably dispense with any further addition to their number.

Case of Prolonged Gestation.

By J. INGLEBY-MACKENZIE, M.B.Cantab.

THE following case is brought forward simply to elicit the opinion of the Society as to the *cause* of this prolongation of pregnancy, and to ascertain how a similar case might affect legitimacy from a medico-legal point of view.

E. C., æt. thirty-two, primipara, married ten years, has always menstruated regularly to the day—viz., 28th or 29th

of the month. Last menstrual period occurred on 28th of April, 1888.

On June 5th was present at the confinement of her sister, whose baby was therefore nine months old prior to date of E. C.'s confinement on March 8th, 1889.

Patient first *felt* the child in September, 1888.

Had false pains, and sent for me January 1st, 1889.

Had a show on Tuesday, March 5th, at 2.30.

Was in labour till Friday morning, March 8th, at 8 a.m. about sixty-six hours, the pregnancy having lasted 314 days, or ten months and twelve days. By ordinary calculation this confinement might have occurred on February 2nd.

It is superfluous to remind this Society that twenty-eight days is the normal period for the recurrence of menstruation, and that birth usually takes place at the end of nine months, from the termination of the last menstrual period, and that from 275 to 280 days have been assumed as the length of pregnancy from the time of Hippocrates, and adopted as a popular theory for at least 1,000 years.

The exception proves the rule, we were taught, and many instances of exception to this rule are quoted in the text-books on midwifery and medical jurisprudence.

The Prussian Common Law recognises no pregnancy longer than 302 days.

The Rhenish Civil Code 300 days, though in other cases it states it as being 270, 285, and 302 days, and gives a longer duration to legitimate than to illegitimate pregnancy.

The Code Napoleon has enacted that a child born 300 days from the departure or death of the husband shall be considered legitimate.

Dr. (Sir James) Simpson records cases which occurred in his own practice in which the period reached 336, 332, 334, and 319 days respectively; Dr. Atlee two cases of 356 days each, and Professor Meig's case, reported by Tarneau (*Gaz. des. Hop.*, 1859), pregnancy extended to 311 days.

Fœtus carried twenty-two months beyond term is recorded.—*Boston Med. and Surg. Journal*, 1860.

Auman, *Ed. Med. Jour.*—A woman in great mental and physical distress in her eighth pregnancy was delivered *twenty-six days after the period at which labour threatened* of a female child, eleven pounds four ounces.

In Dr. Simpson's Case the patient *menstruated* beginning of January—period only lasted two days instead of four, as generally—quickened in May, and expected to be delivered end of September or beginning of October, but not delivered till November 29th. Assuming she did not conceive till the period at which the catamenia ceased, the duration of pregnancy could not have been less than 300 days; but if (as the author thinks) from the short menstruation and the date of quickening she conceived about the period in January, then utero-gestation continued 329 days. Child 21 inches long; weight 10½ pounds; the head 14¾ inches in circumference; anterior fontanelle small; posterior nearly obliterated.

Alberti relates the case of a woman who was confined 11 months and 15 days after the departure of her husband. The faculty of Halle (1727) decided that this was a case of protracted pregnancy, and the child legitimate. The faculty of Leipsic (1638) declared that a child given birth to by a widow after an alleged pregnancy of one year and thirteen days was one of those cases "*qui rarissimes et prieter naturam accedant.*"

How is this prolonged pregnancy to be accounted for? The only suggestion I have come across is that it may be due to the age of the parents, Dr. Clay, of Manchester, being of opinion that the younger the mother, the shorter the period of gestation. Elsewhere I find it stated the lengthened period is dependent on the length of interval in the menstrual period of the mother.

Dr. FANCOURT BARNES mentioned that in a trial bearing on a question of legitimacy in which he was engaged some months since, it was agreed by all the medical witnesses that 280 days was the extreme limit of gestation. One fatal objection to all such cases as those just brought forward was the fact that a woman might menstruate several times after impregnation had taken place, and, on the other hand, she might become pregnant after a period of amenorrhœa.

Adjourned discussion on Dr. BANTOCK'S paper.

Dr. EDIS said there were several points of considerable interest, and it was very kind of Dr. Bantock to have called attention to them and to have given the Society the benefit of the "wrinkles" which he had discovered in the course of his extensive experience. Dr. Bantock had gone so fully into the question of the inutility of Listerian precautions in his inaugural address that it was unnecessary to revert to it again. He himself quite endorsed the views put forward by him, and firmly believed that the essence of success was utter cleanliness. Years gone by, the grossest carelessness obtained in the matter of cleanliness, but nowadays, no one would open even an abscess without making sure that the instruments were perfectly clean, and therefore aseptic. He congratulated Dr. Bantock upon his series of ninety cases of ovariotomy without a death, but the "personal equation" must not be lost sight of in these cases. The mortality decreases as the experience increases, and that fact was well borne out in the statistics of his successive hundreds of operations. They were indebted to him for those figures, which would be an encouragement to all of them to see how near they could get to the highest standard. Another point he had laid stress upon was the importance of washing out the peritoneum, especially where material had become extravasated into the peritoneal cavity, or where there had been much manipulation of the parts. Passing on to discuss the treatment of the pedicle he called attention to the fact that in one case no less than nine ligatures had been employed—an experience he had never realised. He said he spoke with some diffidence, but he thought that a Staffordshire knot was generally all that was required. He had lost one or two cases from slipping of the ligature, but that was in his earlier days, and the ligature was probably not applied tight enough, or he had possibly cut the stump too short. No such catastrophe had occurred to him of late years. He endorsed what Dr. Bantock had said with respect to the use of opium. He only

used it if the patient was exceedingly restless on recovering from the anæsthetic. In that case the nurse was allowed to give a morphia suppository. He also approved of the plan of washing out the stomach with warm water in case of troublesome vomiting, and of giving nothing by the mouth for at least twenty-four hours after the operation. Dr. Bantock's preference for chloroform as an anæsthetic was after all only a matter of opinion. He (Dr. Edis) had tried both, and his experience rather inclined towards ether, especially when the operation was likely to be prolonged, or when they had to do with enfeebled subjects. With respect to the practice of giving saline purgatives in threatening peritonitis he shared Dr. Bantock's scepticism as to the result. If a case had begun to go wrong he knew nothing that would have much effect in arresting the course of the disease.

Dr. BARNES agreed with what had been said with regard to Listerism. The spray had disappeared before the light of advancing knowledge. With respect to the treatment of the pedicle by ligature he pointed out that long before Dr. Bantock had adopted that plan it had been used by Dr. Tyler Smith. He was also inclined to agree with what had been said with regard to the routine use of opium after operation. He was quite certain that in more than one case death had been due to the use of carbolised solutions for washing out the peritoneum. It was generally admitted at present that the intra-peritoneal injection of carbolised solutions was dangerous, and it was, moreover, quite unnecessary. He entirely concurred in his treatment of vomiting; quiet and rest were the chief things. With respect to thirst he had had some experience of the use and abuse of ice, and he condemned it altogether. It only made patients more thirsty. The same remark applied to the use of ice in puerperal febrile conditions. It was, in his opinion, a most dangerous expedient for the reduction of inflammation. He alluded to Dr. Tyler Smith as one who had done much to give gynæcology its proper scientific position in this country.

Dr. JAPP SINCLAIR said he was not at all convinced of the

uselessness of antiseptics. He thought that the gentlemen who shared Dr. Bantock's views lost sight of the beginnings. They were very much in the position of certain people with whom vaccination was anathema. They overlooked the condition of things at the time that vaccination was introduced, and this was the case with these surgeons and the condition of things when antiseptics were introduced. Everyone was ready to give up the spray, but it was impossible to overlook the good results of the so-called antiseptic midwifery. He said if they took some eggs beaten up and left them exposed to the air, some of them containing an antiseptic and others not, they would soon see what the effect of these antiseptic agents was in retarding putrefaction. He urged that a surgical operation exposed the tissues to the action of certain pathogenetic bacteria. If the patient were robust and the number of micro-organisms small then he might resist their attack, but otherwise if antiseptics were not employed their presence in the tissues would give rise to suppuration or abscess, or in the peritoneum to septic peritonitis. He could not find words to express his obligation to Mr. Tait for having introduced the practice of washing out the peritoneum. He saw that Dr. Bantock alluded contemptuously to the use of saline solutions instead of pure water. He would like to discuss that point with him, but time would not allow of that now. He confessed himself a heretic in respect of the use of opium. He had never seen any bad effect follow its use, and he thought that to forbid its use altogether after some of these operations was downright cruelty akin to refusing to allow a patient to be anæsthetised. The use of purgatives rested purely on Mr. Tait's authority, and on the strength of that it had come largely into use, too, in America. He considered that the practice only added needlessly to the sufferings of the patient with septic peritonitis. He thought that they confounded two classes of cases together, those in which there was some elevation of temperature in consequence of constipated condition of the bowels and those in which that symptom marked the commencement of inflammation.

Dr. CHAPMAN GRIGG regretted that Dr. Bantock had not entered more fully into the question of peritonitis, of which he said there were two forms, viz., septic inflammation, and the simple spread of inflammation from injured structures. He asked whether he had tried the plan of opening the abdomen in cases of septic peritonitis and washing out the cavity, and whether he had tried the drainage tube in such cases and with what success. With regard to purgation in peritonitis, he said he had seen a good deal of it, and his experience had taught him that if they could get the bowels open in cases of septic peritonitis by moderate means, it tended enormously to the recovery of the patient. It was mistaken kindness to give opium to relieve the sufferings of such patients, for it reduced their chances of recovery to practically nil. The old-fashioned way was to give calomel in combination with the opium, so as to prevent the binding effects of the opium on the bowels. He always kept the bowels freely open in all such cases, and under no circumstances would he allow opium to be given. If pushed, he did on rare occasions authorise the injection of some laudanum in the form of a starch enema, or as Dover's powder.

The SECRETARY read the following: MY DEAR SIR,—I thank you for forwarding me a proof copy of Dr. Bantock's instructive paper. Fearing, however, that I shall be unable to be present at the adjourned discussion, owing to the exigencies of my practice, I am induced to forward you the remarks I feel disposed to make if I attended the meeting. Not being an operative specialist in abdominal surgery I cannot speak from personal knowledge of the value or otherwise of Listerism in this department, but the brilliant results of Dr. Bantock's work may be taken as further evidence how we may be led astray upon false conclusions. He is, indeed, to be congratulated upon the operative work he is able to record, which success he claims in a great measure to be due to the abandonment of the so-called Listerism, especially the introduction into so large an absorbent serous cavity as the peritoneum of such powerful toxic agents as carbolic acid or mercury. There appear to me, however, elements contri-

buting to this success, which possibly the modesty of Dr. Bantock prevented him from mentioning, which I consider should not be ignored in the consecutive statistics of his ovariectomy cases, for it must be borne in mind that, coincidentally with the abandonment of antiseptics and the strict observance of asepsis, came as a supplement to his inherent surgical aptitude a growing experience, giving him a confidence and fertility of resource in difficult cases only to be attained by practice.

Among the advances in professional knowledge made known by experts in abdominal surgery, the treatment of peritonitis stands pre-eminent. Formerly, this condition was viewed too much as an entity, and a system of treatment, mainly, therapeutic, by opium, was blindly followed, irrespective of etiology. Now, however, it is properly viewed as a symptom, or rather a condition, arising from some primary cause, upon the correct knowledge of which only can rational treatment be based, whether surgical or otherwise. Though opium in the past has undoubtedly been indiscriminately employed in acute peritonitis, yet it should not be wholly condemned, for a drug of such value as an analgetic agent will surely be appreciated when cases adapted for its employment are better understood.

Yours faithfully,

November 13th.

JOHN A. LYCETT.

Dr. BANTOCK, in reply, said he had carefully pointed out that his reason for using so many ligatures in the particular case alluded to by Dr. Edis was the size of the pedicle, which was far too large to be effectually compressed by a single ligature. He had therefore to subdivide it into several sections and apply a separate ligature to each. He had explained, too, that his ordinary way of treating such pedicles at present was to apply strong pressure with the forceps he had adapted, thus reducing the amount of tissue to be included in the ligature. Those were the cases that taxed the resources of the surgeon. In exceptional cases no forceps or other method of

applying pressure could be used, and no other course was open except enucleation. By using the powerful pressure forceps it was at present possible to use one instead of four or five ligatures. With regard to the use of opium, he observed that in very few of the cases were the sufferings of the patients so severe as to make it cruel not to give any sedative. Even after hysterectomy, in which the pain was sometimes very severe, patients could always be induced to forego the present advantage for the sake of the permanent relief that followed when it was not given. With respect to the relative merits of chloroform and ether, he said he had had plenty of experience with ether, but ever since he had begun working at the Samaritan Hospital, with one exception, nothing but chloroform had been given to his patients. At the beginning, chloride of methylene was the rule, but as everyone knew now that was only impure chloroform, and as soon as he had a voice in the matter he substituted chloroform, feeling that it was a much safer anæsthetic than the methylene. Since then, his colleagues had fallen in with the habit, and chloroform was now the universal anæsthetic. Dr. Edis thought that chloroform was a depressant of the heart's action, and that ether was not, but he narrated the case of a patient with cardiac disease in whom anæsthesia was commenced with ether, but they were so long getting her under that they discarded it and took to chloroform. The effect on the pulse was most remarkable; from being irregular and precipitate it calmed down under chloroform, and began to beat like a normal healthy heart. In his first case of ovariectomy the patient had a very irregular pulse from cardiac valvular disease, and Dr. Sansom, who gave the chloroform, had paid particular attention to the pulse. Directly the chloroform began to act, the heart became perfectly steady. In the particular case alluded to, ether would have been specially objectionable, for the patient was suffering from chronic bronchitis. He joined issue directly with Dr. Edis on this point, not only on account of his personal experience, but with the physiological effects of ether and chloroform in view. It was

quite true that Dr. Tyler Smith had performed a number of operations in this country, in which he used the ligature for the pedicle, and his success was remarkable, but it must not be forgotten that even he was not the first man to use the ligature, and everyone forgot that he had used it in so many cases because his experience was overshadowed by Sir Spencer Wells, who had brought the clamp and the extra-peritoneal method of dealing with the pedicle into notoriety. When he himself had begun practice the clamp was *the* method of treating the pedicle, and no one thought of using the ligature, except in cases where for any reason the clamp could not be applied. It was under these circumstances that he determined to give up the clamp and adopt the ligature as the only and exclusive method of treating the pedicle. One other method was the actual cautery, introduced by Baker Brown, and so successfully used by Keith. This method, however, was practically the monopoly of Keith, while Wells used the clamp. He took credit to himself only to this extent, viz., that while not the originator of the idea, he was the first to insist upon this as the proper and the best method of treating the pedicle. Up to the time at which he had recorded his observations before the Obstetrical Society there was not an observation showing what became of the ligature when left within the peritoneal cavity. In Spiegelberg and Waldeyer's experiments the ligature was found intact at the end of a few weeks. His patient after twelve months showed what actually happened to the ligature—the whole of it, with the exception of the knot, being absorbed. It was from knowing that the distal extremity of the stump did not slough that he determined to give up the clamp. He was glad to find that in the main Dr. Sinclair agreed with him, although from a discussion point of view it was perhaps better that he did not agree all round. He pointed out that the experiments alluded to by Dr. Sinclair were in no wise comparable with what took place when they were dealing with living tissues. What followed after an amputation of a breast, for example, showed that the result was quite different according as they

were dealing with living or dead protoplasm, and the same remark applied to operations for the restoration of the perinæum. The more he thought the matter over the more surprised he was that these facts did not convince men of the uselessness of antiseptics, not to speak of their injuriousness. The most remarkable thing was that they went on from one poisonous substance to one that was far worse. Carbolic acid was dangerous enough, but corrosive sublimate was ten times worse. Dr. Grigg had raised the important question as to opening the abdomen and washing it out in cases of septic inflammation. His paper was already a long one, or he would have gone into this point at greater length. It had happened to him to have to open the abdomen in such cases, but he had been very much disappointed with the results. Possibly he had operated too late, but he had done it at various stages, and never with satisfactory results. Drainage did not seem to make any difference, for they all died. In other cases where there was a doubt he had abstained, and the patients had recovered. It was indeed one of the most difficult questions that could come before them, and nothing gave him greater anxiety. As to the use of purgatives in these cases, he said it must not be forgotten that when acute peritonitis began, sickness was the first symptom, and everything that was put into the stomach made matters worse. If diarrhœa came on the patient would probably recover, but he deprecated the use of purgatives, on account of the already exhausted condition of the patient and the sickness. The plan resembled the abortive treatment of fevers by emetics. If an emetic were given and no fever appeared, who is to tell whether the patient would or would not have had it had the emetic not been given? His experience had taught him that when peritonitis has set in the less they interfered with the bowels, the better.

*Report on Dr. GRANVILLE BANTOCK'S Specimen.—Received
October 9th, 1889.*

THE specimen consists of the Fallopian tube, parovarium, and a tumour which, after immersion in spirit and water, is the size of an adult's head.

The Fallopian tube is three inches in length, and is not attached by adhesions to any part of the tumour, but appears perfectly normal.

The parovarium is visible on holding the specimen up to the light, and is normal.

Passing over the Fallopian tube and covering the parovarium is a layer of peritoneum, which passes on to and is finally lost in the walls of the tumour.

The wall of the tumour varies in thickness and consistency, the average thickness being from one-sixth to a quarter of an inch. A somewhat rounded portion of the cyst wall, measuring six by four inches, is of almost cartilaginous hardness and half-an-inch in thickness.

Internally the cyst wall is smooth in the greater part of its extent, but there are patches of papillomatous growths sprouting out in places. The largest of these growths is situated on the inner side of the tumour wall, and measures two inches in length, one inch in breadth, and three-quarters of an inch in thickness. A thin layer of viscid mucoid fluid of a brown colour covers the whole inner surface of the tumour.

Beyond the papillomatous outgrowths and two or three small areas of degeneration, there is nothing peculiar to be noted on the inner surface.

Examination of Fluid Contents.—About one drachm and a-half of the fluid contents was collected and examined microscopically. Chemical examination was not made, on account of the small quantity of fluid. The reaction was decidedly alkaline. A microscopical examination of the fluid showed columnar epithelium in large quantities, the cells being both single and collected together in rows; goblet-shaped cells with mucoid material discharging from their free

extremity; pavement epithelium and a few irregular-shaped cells, all being in an advanced state of fatty degeneration. Besides the epithelia mentioned, there is much granular *débris* and broken-down red and white corpuscles. No trace of cholesterin crystals could be found.

Microscopical Examination of the Tumour Wall.—Sections were made from three separate parts of the tumour wall, and stained with logwood and carmine. Starting from the inner surface of the tumour it is seen to be covered with a layer of non-ciliated columnar epithelium which rests upon a bed of connective tissue with small rounded cells, the fibres and cells forming continuous wavy bands. Beneath this layer is another layer of connective tissue, the strands in this case being looser and interwoven one with another.

The outermost layer consists of extremely dense white fibrous tissue.

The papillary projections referred to in the naked eye description of the tumour under the microscope present all the appearances of these growths. Fine branched and single papillæ stand out prominently from the epithelial surface of the tumour. Each papilla is covered with non-ciliated columnar epithelium, and has passing up its centre delicate meshes of connective-tissue containing blood-vessels. A delicate connective-tissue basis connects these growths with the subjacent denser layers, and contains in its meshes a few round and oval cells.

There is no trace of non-striated muscular tissue.

From the above description it will be seen that the tumour is a papillary cystoma originating in the paroöphoron or hilum of the ovary.

HENRY T. RUTHERFOORD.

October 21st, 1889.

HEYWOOD SMITH.

BEDFORD FENWICK.

*Report on Dr. R. T. SMITH'S Specimens.—Received
February 2, 1889.*

THE parts sent for examination are the stomach and duodenum with a portion of the mesentery, and the uterus and its appendages.

Stomach (after immersion in spirit for five months).—Is much contracted in size, and its cavity is small, holding not more than three ounces of fluid ; but it forms a very dense mass, owing to an extreme thickening of its walls. The peritoneal surface in front and behind is normal, but the omenta along both greater and lesser curvatures are converted into thick dense masses of material by a new formation in the fatty tissue, and by adhesions to the surrounding parts.

On laying open the stomach along its greater curvature, the interior presents the rugose appearance of the normal mucous membrane, but on examination the rugæ are found to be much coarser than normal, and, like the rest of the stomach, exceedingly dense—in fact, they form so many hard cords stretched across the inner surface of the stomach.

The walls of the stomach are thickened throughout, extending from the end of the gullet to the duodenum ; the middle third or body of the stomach is, however, most affected, and here the thickness of the wall at one spot reaches five-eighths of an inch. The average thickness is about one-third of an inch. A vertical section shows that the change consists of an extreme thickening of the sub-mucosa, which forms a white glistening fibrous layer between the mucous and muscular coats. The mucous membrane is firmly adherent to this layer, and cannot be dissected off. The muscular coat is divided up into a number of bundles of fibres by strands of the same white fibrous material, which strands combine to form a thin, but distinct, layer outside the muscular coat and immediately beneath the peritoneum.

The *duodenum* is healthy, but at its junction with the jejunum it has become invaded by the new formation in the mesentery in such a way that the mesenteric border of the intestine is thickened to the extent of a quarter of an inch, and this increase tails off on either side of the attached border, thus forming a plaque in the wall of the bowel an inch in breadth.

The head of the *pancreas* is surrounded by much dense tissue, but its glandular structure appears normal.

The *portal vein*, as far as it has been preserved, is normal, and the glands in the mesentery are not enlarged.

The *uterus* is about normal in size, and its structure appears healthy on section, but there are a few shaggy peritoneal adhesions on both anterior and posterior surfaces.

The *bladder* is normal, and the ureters are not dilated.

The *vagina* and os uteri are healthy.

The *ovaries and Fallopian tubes* are much affected on either side. The ovaries are bent back and firmly adherent to the posterior surface of the uterus. The tubes are likewise displaced, and adherent to the ovaries, so that the parts in either broad ligament are barely recognisable from the extensive matting which has taken place. On further dissection the tubes showed, beside the adhesions above mentioned, retraction of their fimbriæ, and some dilatation of their outer extremities. The ovaries were enlarged, and converted into dense whitish masses with semi-transparent areas scattered through them, which yielded a small quantity of juice on scraping.

Microscopical Examination.—The wall of the stomach was examined in different parts. The tissues were hardened in alcohol and the sections stained with logwood and eosin, and mounted in balsam.

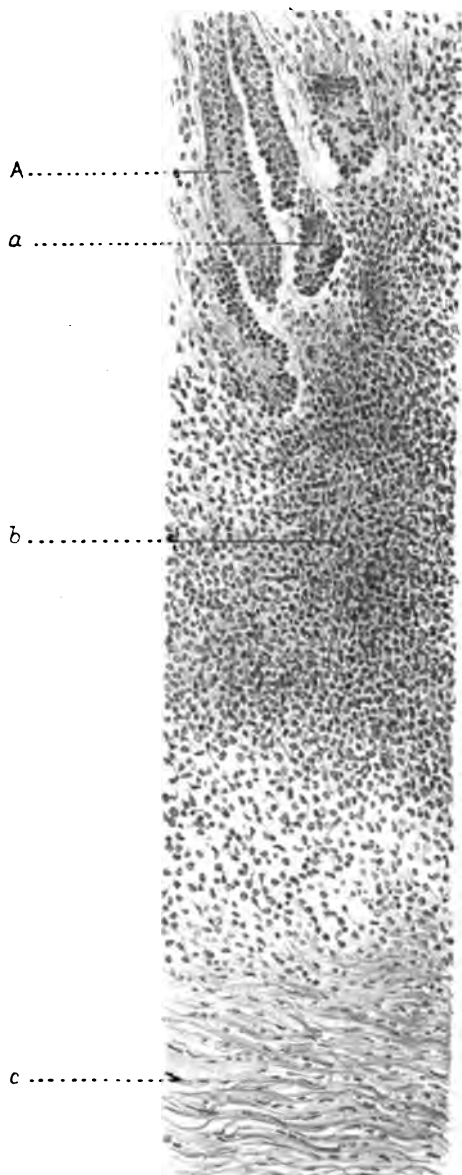
Under a *low power* there was an abundant cell formation in the deeper part of the mucous membrane, and in the upper one-third of the sub-mucosa. The tubules of the mucous membrane were still visible, and appeared normal, but their bases were embedded in this new formation. From the sub-mucosa the cells extended into the muscular coat, replacing the muscle in some places, and forming a second smaller aggregation in the sub-peritoneal tissue. The lower (deeper) two-thirds of the sub-mucosa was composed of tough fibroid tissue, among the fibres of which the above-mentioned cells were spreading. Under a *high power* the cells immediately beneath the gastric tubules were massed together without alveolation. They were larger than inflammatory corpuscles, round or squarish in shape, and had comparatively small nuclei.

DR. R. T. SMITH'S CASE OF FIBROID INDURATION
OF STOMACH.

- A. Gastric tubules with their bases imbedded in an abundant new cell formation.
- B. Lower part of *mucosa* and upper part of *submucosa*. The new cell formation is here very marked. The cells are larger than inflammatory corpuscles, round or squarish in shape, with small nuclei.
- C. Part section of deeper layer of *submucosa* and *muscular coat*. The structure becomes denser as it advances towards the peritoneal coat, but is not all figured here on account of its great thickness.

The infiltrating character of the new cell formation is well illustrated.

To illustrate Dr R.T. Smith's case of
Fibroid Induration of Stomach.



They appeared mingled with fibres and vessels in a manner in which no definite arrangement could be made out. However, by examining the deeper part of the sub-mucosa, which was composed of fibroid tissue, the infiltrating nature of the new formation was easily seen. There the cells were spreading in rows among the fibres, recalling at once the appearances of the edge of a scirrhus cancer of the breast.

Sections of the jejunum and mesentery confirmed the above account. The new formation had spread from the mesentery into the adjacent portion of the bowel, where the sub-mucous and muscular coats were invaded by it, and consequently thickened. The character of the cells was precisely the same there as in the stomach.

The ovaries showed chiefly degenerative changes.

Conclusion.—In forming an opinion on the nature of this disease, due regard should be paid to the condition of the remaining viscera, the presence or absence of malignant disease elsewhere, the state of the abdominal glands, and the history. The first question to be decided is, whether the lesion is inflammatory or not?

The size and character of the cells, their arrangement, the want of evidence of their conversion into fibrous tissue, and the peculiarly infiltrating nature of the cells are sufficient to warrant a reply in the negative. Assuming, then, that the new formation is malignant, is it carcinomatous or sarcomatous? The absence of alveolation and the comparatively small size of the cells are unlike carcinoma, but the linear infiltration of the tissues is a very characteristic feature.

I would submit, then, that the disease is a diffuse scirrhus carcinoma, originating in the stomach most probably from the bases of the gastric tubules in the mucous membrane; that the chronic peritonitis and thickening of the mesentery are secondary effects, and that the pathological changes of this disease correspond with those of the so-called "cirrhosis of the stomach."

It is right to add that the description of "Cirrhosis of the Stomach" to be found in the text books does not agree with

the above statement. Thus Quain ("Dict. of Medicine," p. 1534) says: "All those who have examined these cases have come to the same conclusion—namely, that the connective tissue alone is universally increased in thickness, and that there is an absence of any indication of cancer."

Fagge (2nd ed., vol. ii., page 366) says: "This disease (cirrhosis or fibroid induration) of the stomach is one in which its walls are uniformly thickened, without the development of any morbid growth."

He adds:—"Probably it would be impossible to distinguish cases of this kind from those of diffused sarcoma of the stomach."

Pepper ("System of Medicine," vol. ii., p. 614) says: "The essential lesion is the new growth of fibrillated connective tissue pervading all of the coats of the stomach."

He adds in a footnote: "In a case of ovarian cancer with secondary deposits in the peritoneum the stomach presented the typical gross appearances of cirrhosis, but here and there I found nests of cancer cells in the prevailing new growth of fibrous tissue in the walls of the stomach."

Without burdening this report with any further quotations, one might sum up the generally-received characters of this disease in the following manner: Cirrhosis of the stomach is a rare disease, giving rise to such vague clinical symptoms that it is rarely, if ever, diagnosed; it is always attended with chronic peritonitis, and presents such anatomical features as are mentioned above. To this I would add (as an expression merely of my own opinion) that it represents a type of primary malignant disease of the stomach, but whether always carcinomatous, or always sarcomatous, there is not sufficient evidence yet to say.

JAMES H. TARGETT,

Assist. Pathologist Royal College of Surgeons.

August 1, 1889.

The society then adjourned.

THE BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, NOVEMBER 27, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

PRESENT: 28 Fellows, 7 Visitors.

The following was elected a Fellow of the Society:—Dr. Edgar Duke, St. Leonards-on-Sea. The following were proposed for election:—John Francis Insky, M.D., Cork; A. Langley, London; Cyril John Williams, Woodhall Spa; Frank Leslie Philips, M.D., of Birmingham; Christopher Martin, M.D., Edinburgh.

Dr. BANTOCK showed a number of specimens exemplifying fibroid tumours of the uterus. The first case was a large soft fibroid weighing eleven pounds; the whole of the mass was enucleated, and it was adherent to a small extent, about an inch, to the back part of the uterus at the lower part of the body. The uterus was drawn so high out of the pelvis that it was impossible to reach the cervix. There was a history of several pregnancies, in which the small size of the pelvis was the cause of difficulty in delivery. The softness of the tumour had led him to believe that it was a case of broad ligament cyst, it was so like fluctuation that he was misled. The only point to which he wished to call attention was the difficulty of deciding whether or not to remove the uterus at the same time. There was considerable bleeding from the cervix when the tumour was removed, but he applied a number of ligatures and succeeded in arresting the hæmorrhage, and this induced him to leave the uterus. He had already ligatured the ovaries and removed them, but in another case of the same kind he would be inclined to facilitate the after-treatment by moving the uterus as well, because he had no doubt that a good deal of the bleeding that took place into the sac came from the

uterus, and if he had removed it the amount of bleeding would have been diminished and convalescence shortened. The patient was doing very well, though there was still a small sinus. The operation was performed on the 22nd October, and the patient was thirty-two years of age.

The next case was an exceedingly interesting one. It was a tumour taken from a single woman, forty-two years of age. After dividing the capsule of the uterus and shelling out the enlarged mass he then had to turn out several others, shelling them out from the base of what would otherwise have been a pedicle, and when this was done he was so low down in the pelvic cavity that it was impossible to apply the *serre-nœud*. He controlled the bleeding in the meantime by the elastic ligature. He separated the peritoneal covering from the uterus, and then he found that the bleeding came from the uterine tissue. He put a *serre-nœud* on the raw surface and then stitched the peritoneal end to the parietes, but there was another tumour down in Douglas' pouch larger than those he had removed, and the question arose what to do with it. The removal of such a tumour in this situation appeared so dangerous that he decided to leave it, even at the risk of sloughing, because from its situation it would have a better chance of escaping. On the right side there was a soft swelling of some size, possibly a hydrosalpinx, but that, again, was in such a situation that to attempt its removal would have been to risk a fatal result. They had given no trouble at all since, and he had no doubt that in a short time the hard fibroid would diminish in size now that its blood supply had been cut off. What would become of the soft swelling on the right side he did not know, but so far the patient had not had a bad symptom.

The next case was one in which he was sorry to say he had lost his patient; she was a single woman, over forty years of age, and was so much reduced by hæmorrhage when she came into the hospital that he was obliged to keep her in bed three weeks, with good feeding and tonics, before he considered she was fit to undergo the operation. She was

subject to an almost constant hæmorrhagic discharge, associated with more or less high temperature, generally over 99°. There was a large mass in the abdomen, and another in the pelvis projecting so much into the vagina as to obliterate the cervix altogether, which consequently could not be reached. When he came to do the operation he found a very large base to this tumour, and another large tumour going down into the pelvis. After dividing the capsule he put on an elastic ligature and controlled the bleeding so that the patient lost very little. He then enucleated the large mass in the abdomen, but did not know what to do with the tumour in the pelvis, it was so large that he was very much afraid that, the circulation being interfered with, it would slough and give rise to trouble, and he was therefore tempted to try and get it away. He enucleated more than three parts of its circumference when he came upon a part so dense that he could not get through it, and the only thing he could do was to take hold of it with the vulsellum and cut it away piecemeal. The patient lost so much blood during this part of the operation that he was afraid she would die on the table, and as a matter of fact she died three hours later. He admitted that he had made a mistake in not leaving it alone when he came to that part, although there would still have been the risk that a large hard fibroid like this in the broad ligament might have sloughed; still he would have been wiser to have left it alone, and in future he would leave such a fibroid to take care of itself.

The other case was an interesting one, the tumour having been removed ten days ago from a married woman with no children, who had been subject to menorrhagia and discomfort from the presence of fibroids for a number of years until at last she had come to the conclusion that life as such was not worth living, and wanted something done for her relief. The tumour occupied the posterior wall of the uterus, and below, very low down, there was an outgrowth from the back of it. It was so low down that they could not apply the *serre-nœud*, so he put on an elastic ligature dividing the capsule longitudinally to get at the mass from below till he found he had a very

fair pedicle, to which he applied the *serre-nœud*, and the patient had done very well, never having had a temperature above 99°.

Mr. REEVES said that, in lecturing to students he had been compelled to teach that enucleation of a growth from the uterus in any form was totally inapplicable, and that it was very much safer in most cases to remove the whole uterus. In the literature of the subject the mortality of enucleation, whether from the uterus or from between the layers of the broad ligament, was very large, and convalescence was long, no matter what treatment was adopted; whereas the mortality after the removal of the uterus was much more favourable. He had removed the uterus successfully in four cases by supra-vaginal amputation. After tying the broad ligament he tied the uterine arteries. He said that if these arteries were tied there was no hæmorrhage. He thought that the best thing was to make it an intra-peritoneal operation. He mentioned that in his last case he had left a silk ligature around the cervix and out of the lower end of abdominal wound. He thought long manipulation was bad if the tumour were large, and he much preferred the removal of the uterus. If there was any difficulty with the bladder it should be dissected from the uterus, the pedicle being treated either by the intra-peritoneal plan, or the cervix removed *per vaginam* if necessary.

Mr. LAWSON TAIT said his experience did not coincide with that of Mr. Reeves. He said that speaking strictly in supra-vaginal hysterectomy there was really enucleation in the majority of cases; it was precisely the same condition as in cysts of the broad ligament. Many of these cases they had to enucleate on the fundus of the uterus, right down to the very bottom, and the amount of it disappeared until they got some with a good pedicle like an ordinary tumour. That morning he had put a ligature round the infantile uterus of a lady from Salt Lake City, the wife of one of the elders there; she had a tumour the size of a washhand basin, of which the fundus was the pedicle; but that case was quite exceptional, and in the great bulk of cases they enucleated just as they

would amputate a thigh. One of the specimens shown by Dr. Bantock showed this very well. Their mortality had been 8 per cent. extra-peritoneal, but if they took the intra-peritoneal it would be much higher. He would have to see more than four or six cases before he would go back to the intra-peritoneal method under any conditions whatever.

Dr. FENTON said that from what he had seen he could not but agree with Mr. Tait that it was impossible to get through any series of these cases without employing the art of enucleation; one could hardly set out on an operation without contemplating this contingency. By that method they got a stump which was handy to deal with outside the peritoneal cavity; the objection to this stump was that after a few days it became most horribly fœtid, and became a wet, corrupt mass, and any way of dealing with the stump in order to prevent that must be an advantage. He handed round the remains of a stump which was pulled off a few weeks ago, in a case of hysterectomy with enucleation. Immediately after the operation he had applied persulphate of iron to the stump, which became hard and horny and so dense that it was impossible to cut it; that was a comfort, because it was dry without smell, and there was no fear of secondary hæmorrhage.

Dr. BENNINGTON pointed out that the tumour was one of the so-called sub-peritoneal fibroids, and was therefore not a case of enucleation at all.

Dr. FANCOURT BARNES said he quite agreed with Dr. Fenton as to the treatment of the stump of the cervix in Porro's operation; he had never seen any stump so clean, nor one that smelt as sweet as that one. It was evidently an excellent plan of treating them.

Dr. BANTOCK pointed out, in relation to the nature of the case alluded to by Mr. Reeves, that the tumour originated in the back part of the uterus, a little above the external os, growing upwards and backwards, always outside the peritoneum, which was carried before it as it grew until at last it occupied a great part of the pelvis, and the only possible way

of removing it was to slip the peritoneum off. When he had nearly completed the operation he found that there was only a small piece attached to the posterior wall of the uterus, which itself was very little enlarged. He divided the connection to see what was to be done. He had said that in any future case he would remove the uterus. Having already removed the ovaries, he knew he would have to drain the large sac out of which this tumour came, and he did not care to have a drainage tube and a *serre-nœud*. There was no other possible method of treating this. He failed to see the force of Mr. Reeves' objection to enucleation. His object was to free the broad ligament, for they were on such a stretch that when the tumour was out it would be impossible to put on a *serre-nœud* with a wire long enough to keep up the pressure. By dividing the broad ligaments they lessened the strain and they could reduce the pedicle after the application of the *serre-nœud*, first applying an elastic ligature. As he had said in the paper which he read at New York, they must make their pedicle for themselves when it was not ready made. Mr. Tait had pointed out the necessity for extensive enucleation, as in the case of broad ligament cysts, in some few cases of parovarian cysts, where there was no pedicle. Sometimes the tumour would dip down quite to the level of the os, down into the broad ligament, where it would be impossible to get a pedicle, and they must drain. There was just one point in reference to the treatment of the stump. At a former meeting Dr. Fenton had called attention to what he was pleased to call his instrument. He would take this opportunity of saying that he had perhaps been a little too modest in the matter of giving his name to instruments, and from the very first, although his instrument was very much unlike the original instrument of Koeberlé's upon which it was based, he had been in the habit of alluding to it as Koeberlé's instrument. In fact it was only at a recent date, when he found that men would not give him credit for what he had done in the matter, that he had insisted upon the instrument being called his modification of Koeberlé's

instrument. He believed that this instrument answered the purpose for which it was intended better than any other in the market ; it was more simple, more efficient, and with his latest improvement in having it made of Delta metal instead of steel, one particular objection to the use of metal had been overcome. He said that they had heard something of the offensive smell arising from the stump in cases of hysterectomy. If they used persulphate of iron to dry it it was very difficult to prevent some of it getting down between the lips of the wound, and he believed that some patients had lost their lives in consequence of the irritation caused thereby extending to the peritoneum. In the old days of the clamp he had seen patients die from sloughing of the pedicle, and he thought that was due to the iron running down to the wound ; he had therefore never used anything of the kind. If they got a moderate-sized pedicle and trimmed it down, leaving just enough tissue for the pins to hold by, they need never be troubled by a wet stump. If they stitched the peritoneal edges over the stump, reducing it to a small size, and then packed the stump well round with absorbent gauze, in three days it would be as dry as possible, and the risk he had mentioned would have been avoided. Mr. Mayo Robson had said to him that the only case he had lost at the fourth or fifth day he was inclined to attribute to the fact that the *serre-nœud* had been tightened up after twenty-four hours ; but he (Dr. Bantock) thought it was much more likely that the iron had got down below the wire, and set up irritation. With the metal of which his instrument was made no decomposition of any kind was to be feared. He never sees a blackened stump now, and if they tightened the instrument sufficiently to keep it dry they need have no trouble at all. He observed that the wire pulled on both sides instead of only on one side, as in Dr. Fenton's instrument ; that was not the case with Tait's instrument, but he would not like to use even that instrument with the pressure he was in the habit of applying.

Mr. LAWSON TAIT read a paper on a case of intra-peri-

toneal hæmatocele due to rupture of a tubal pregnancy treated by abdominal section and the removal of the ruptured tube. On August 20th at eleven o'clock Dr. Nelson called upon him in reference to a married woman, of twenty-six, whom he had seen the night before, and who had complained of sudden pain in the lower part of the abdomen; she was found in a condition of collapse, with all the symptoms of internal abdominal hæmorrhage, and the one point in the history which gave him a clue to the nature of the case was that she had missed two periods. The patient was brought to the hospital within an hour, and though absolutely pulseless, she was anæsthetised. He opened the abdomen, and the rush of blood was as if he had opened a hydrant. Regardless of the blood and blood clots he went straight for the fundus of the uterus and discovered that a tubal pregnancy existed and was ruptured in the right Fallopian tube. Passing a needle swiftly into its base he tied the broad ligament, cut off the tube and ovary, and then proceeded to remove many pounds of clots and blood serum from all parts of the abdomen; he closed the abdominal wound, leaving the drainage tube. Not a single drop of blood was lost but it was fully forty-eight hours before it was possible to count the pulse. She might, however, be regarded as already entirely recovered. He said the rent in the tube was not more than a quarter-of-an-inch in extent, the fœtus being not more than in the fourth week of its existence. The second case was one that happened yesterday morning of intra-peritoneal rupture of the tubal pregnancy. This was an unique case, first, because the patient was unmarried, and also because this rupture was not serious so much on account of the hæmorrhage as because of the pain. The patient was a governess; she had had an unfortunate occurrence fifteen months ago, when she contracted gonorrhœa and a tubal pregnancy; then she had a violent attack of pelvic peritonitis. Her age was twenty-seven. She began to menstruate at fifteen, very irregular until twenty, missing three, four and six months; had always experienced pre-menstrual pain. Last menstruation

began November 1st. Fifteen months ago she was in the Waterloo Hospital for Women for an affection of the ovaries, &c.; was quite unfit for work; frequent irregular menstruation and obstinate constipation. When he saw her he found a hard mass in the pelvis and thought the uterus was retroverted; he thought myoma fixed by peritonitis. On opening the abdomen he saw at once it was not a myoma, but everything was adherent; he felt as if it were a cyst adherent. All the way round he began to enucleate and pushed in a trocar, but got nothing out. As he proceeded he came to the edge of what was evidently a rent, and there welled up six or seven ounces of blood. He soon saw that it came from the right Fallopian tube which had ruptured into the peritoneum, and then had opened it out like a sort of mushroom and contracted adhesions to the pelvis, and below that there was a distinct ovum and placenta. Probably the foetus was from the tenth to the twelfth week, and this case was an exception to the rule he had laid down of intra-uterine ruptures proving fatal. He showed also a pair of appendages removed that afternoon from a French lady, containing a large mass of chronic hypertrophy; the most noteworthy thing in the case was the high temperature, it having reached 110 on Saturday night.

Mr. REEVES mentioned a case of spina bifida after operation in which the temperature had several times gone up to 107, and once or twice to 110.

Mr. HILL also mentioned a case of phthisis in which the temperature had gone up to 107 and 110.

Dr. BARNES asked what was meant by an apoplectic ovum? He supposed that it meant effusion of blood into the structure of the ovum. This was an expression devoid of etiological sense. When there was an ectopic gestation the tube as the enveloping sac was passive, and the foetus growing, the tube did not keep pace with the growth of the ovum, detachment and hæmorrhage took place. The apoplexy was a secondary accident. Such cases were analogous to placenta prævia, in which the placenta was in part at least ectopic,

and growing in a part of the uterine cavity, that is, in the lower zone, which could develop as fast as the ovum did. Hence portions of the ovum over shooting the line of attachment, gave rise to hæmorrhage, and so if part of the blood got into the ovum they called it apoplectic.

A Criticism on Some Recent Utterances on Ectopic Gestation.

By LAWSON TAIT, Professor of Gynæcology, Queen's College, Birmingham.

IT is now nearly twelve months since I laid before the profession my completed views on this interesting subject, and now I take an opportunity of noting some of the criticisms of the work which occupied much of my time and thought for fifteen years before I published my conclusions.

In the first place I have to acknowledge with gratitude the almost uniform acceptance of my views by American and Continental authorities; indeed, in the case of German writers the acceptance is so complete that their British originals have been completely absorbed into a Teutonic solidarity. American writers, on the contrary, and as is the custom of their country, have fully rendered credit where they believed credit was due, and I have nothing to give them back but the fullest acknowledgment of their generosity.

Of English writers I have, with two exceptions, to speak with as fully grateful recognition. A few criticisms have been offered of a perfectly fair kind upon points where there is either as yet room for difference of opinion, or upon others where, by reason that I did not see the necessity for fuller exhibition of evidence, I did not as completely state my case as I should have done. My excuse is that the field was a wide one and a new one, and that in it I made roads not only fresh but leading almost without exception in directions wholly at variance with those previously accepted, alike in the pathology of ectopic gestation and its treatment.

The writers to whom I wish to draw your attention as exceptions most remarkable occupy columns of *The Lancet*,

an organ of professional opinion, whose good word it has never been my lot to merit, for reasons I suppose I shall never understand.

In its issues for Oct. 12 and 19 last, that journal deals with the subject of "Ectopic Gestation" in two "editorials," under the title of "Extra-uterine Gestation," and begins its discussion by a frank admission "that many alleged cases were not extra-uterine, but which were due to pregnancies occurring in a malformed uterus." The anonymous writer has not yet mastered the indisputable conclusion of all my writing, that we ought at once to give up the term "extra-uterine" for the very reason he gives, coupled with the other, of which he is not ignorant, that the most deadly form of ectopic gestation is truly *intra-uterine*.

This is hardly the place to discuss that much vexed question of journalism, whether articles ought to be signed or not. Most leading articles in the columns of *The Lancet* and of other medical journals deal with subjects more or less of a political nature; and even in medical politics there is sufficient nonsense written to make it advisable that the names of the authors should be withheld.

But as the recognised Editor of *The Lancet* is not a gentleman in whose life the study of ectopic gestation can possibly have been a leading feature, it needs but scant gynæcological wisdom to see that an unsigned article on such a subject in that journal can have but little weight. The writer has such curious ideas of dealing with his subject fairly that he makes one big jump from the confused jumble of the classification of Dezeimeris to the article of Hart and Carter; and he is so deficient in patriotism that he never even once brings in the name of the writer whose book has evidently been the cause of the articles, and whose views he has not even taken the trouble to understand. He evidently has taken some second-hand misrepresentation of them from the German, for he says that Kussmaul proved that "many" alleged cases were not extra-uterine, but were due to pregnancies occurring in a malformed uterus, whereas the fact is that only two cases in the

whole literature of the subject answer the conditions of this anonymous writer, against hundreds, if not thousands, to which the allegation does not apply.

The policy of *The Lancet* has been to ignore the existence of the British Gynæcological Society, and the last editor personally assured me that this was a policy that the journal in question would continue to follow. This mistake is proving a misfortune for its writers as well as for its readers.

As a further illustration of the blundering into which ostrich-like blindness must inevitably lead, let me quote such another sentence, another blunder involved in the use of the term "extra-uterine." "It may be briefly said," continues my critic, "that the differential diagnosis (between extra-uterine and cornual pregnancy, that is the pregnancy occurring in a malformed uterus) depends on the point of origin of the round ligament of the uterus; since this springs from the uterus, and therefore is internal to the tube, a gestation external to its origin must be tubal, internal to its origin uterine." Now our interstitial pregnancies (a more common form and far more fatal than cornual pregnancy in a bifid uterus) is both tubal and uterine: it is not extra-uterine, but most certainly *is* ectopic; so that we must conclude that our anonymous author has not understood the prime steps of the syllogism. He has read my quotations from Kussmaul and Sir William Turner without reading (or at least without being able to understand) how beautifully they fit in as bricks in my edifice; or he has, as I said before, taken some second-hand German appropriation instead of the original work.

This conclusion is inevitable when a little further on he assumes that intra-peritoneal hæmatocele is known to occur as a thing of itself and arising from any other cause than traumatic hæmorrhage from an injured organ such as kidney, liver or distended broad ligament, rupture of aneurism or rupture of a tubal pregnancy. If it does, where are the cases? Who are the authorities?

Upon some of the questions of treatment the anonymous writer, under shelter of the editorial "we," gives ex-

pression to some opinions which are the chief reason of my referring to his article at all. "In my opinion," he says (concerning the treatment of the case in the later months of pregnancy), "in the face of the tremendous maternal risks, it is bad sentiment, bad morality and bad surgery to regard the life of the foetus for a moment." We may leave sentiment out of the question, whether good or bad, but when we come to discuss a question as one of morals, we must at least listen to the voice of mankind. In Europe and America we are governed by the code of morals appertaining professedly to the Christian religion. The morals of this religion, as well as its theology—though not so much—vary according to sectarian view.

The only body, by far the largest and most influential, the only body which has deliberately discussed this question—I mean the Roman Church—has decided that the life of the foetus *must* be considered; and no other sect has formally, or even casually, discussed this question. The morals of *The Lancet* are therefore bad, I may say very bad, upon this point.

When an anonymous writer says it is bad surgery to discuss the question of the life of the foetus, I claim to know what authority speaks? Has he ever operated in such cases? Does he know anything about it at all? I can speak, and have spoken, and the authority of the experience with which my utterances are made is the most extensive that has yet been offered, and my conclusion is that it is safer to the mother to consider the life of the child, and no surgeon will say that the glory to his art is not greater, in any operation to save two lives rather than one.

Even an anonymous writer in *The Lancet* might take the trouble to test the accuracy of such a statement as that "it has been proposed to cut off the cord short and close the wound; but this has not gone beyond the stage of proposal." This has been done and would have been successful, had not the operator trusted to the delusive visions of Lister. That the Editor of *The Lancet* may, with advantage to his readers, make some change in his obstetric staff is evidenced by the

final and ludicrous blunder contained in the statement that "the placenta in these cases may sometimes be determined by palpation, but not by the (incorrectly named) placental souffle," which has nothing to do with the placenta, and in all carefully observed cases has been found to be absent over its site. In the one case in my experience where it was possible to make the observation, the only case where the existence and position of the placenta could be determined at all, it was carefully mapped out by the souffle, and it was found at the operation that my mapping out was perfectly correct.

The number of *The Lancet* in which this remarkable article appears opens with Mr. Bland Sutton's able and pointed essay on "Intellectual Blindness," and our anonymous writer concludes by saying that "the discussion of this question has been somewhat burning in many quarters. It is, above all things, desirable that personalities should be strictly avoided." Dr. Matthews Duncan, therefore, begins his article in *The Lancet* with the remarkable sentence that "it is only audacious ignorance that could give clear and decided teaching on the theory and practice of extra-uterine gestation"—whatever that may mean, whatsoever the *practice* of extra-uterine gestation may be. "And," he continues "it is clearness and decision, when they are fairly attainable, that should characterise the clinical teaching of youth"—leading to an assumption that, when he dare indulge, the great obstetric physician of St. Bartholomew's is not free from audacious ignorance.

Dr. Duncan tells us "that the theory and anatomy of it (extra-uterine gestation—I fear he will never be led to adopt the scientific nomenclature, seeing we owe it to Dr. Barnes) have made some progress, due chiefly to improved anatomical methods, especially homalographic frozen sections, and to the many laparotomies which are now performed in this disease." Dr. Duncan must know, for I happen to be certain that he has read my book, that every fact but one of the anatomy, and abundant confirmation of my theory of

ectopic pregnancy was obtained from my abdominal sections years before the fortunate sections obtained by Hart and Carter established the proof in such a way that even Dr. Duncan could no longer ignore the facts. The one fact in exception was the finger glove extension of the peritoneum retained from the fundus of the uterus. "But," says Dr. Duncan, "laparotomies do, in most cases, give imperfect information as to anatomy. Often, indeed, they mislead." Perhaps that is so in Dr. Duncan's experience; indeed, I am sure it is so, but I submit it depends upon who performs the operation. Before operations were performed by the younger generation of gynaecologists for diseases of the Fallopian tubes, we listened in patient confusion to Dr. Duncan's predilections on *parametritis* and *perimetritis*. Now we give him no heed, for abdominal section has brushed aside all the nonsense he taught. In similar confusion—a striking contrast to the clearness which justifies the efforts of audacious ignorance—Dr. Duncan goes on to jumble up the ancient and modern classification of ectopic gestation, and tells us that "there are two sets of kinds of extra-uterine gestation, with which another, which is not extra-uterine, must be classed, our old friend the cornual pregnancy. Of this you have here a museum specimen." I wonder where he got it, for there is none in the museum at St. Bartholomew's and only one in London—not familiar, I am sure, to Dr. Matthews Duncan, for it comes from a hated laparotomy. "This (cornual) pregnancy is generally easily made out on dissection *post-mortem*!!" Of the three museum specimens known to me one was completely misunderstood when examined first, and so were the other two, being only unravelled by the enthusiasm of a young demonstrator of anatomy, thirsting for the fame which has since deservedly come to him—Sir William Turner. Of these two cases Dr. Duncan knew nothing till they were republished in my book, and of the third I am sure he knows nothing now, for in all his voluminous writings I cannot find a word about this cornual pregnancy about which he speaks with such flippant familiarity, until I

come to this unhappy lecture in *The Lancet*. Besides there being the "two sets of kinds" of extra-uterine pregnancy so clearly defined by Dr. Duncan, he tells us that there are secondary variations. "Thus, an ovarian pregnancy may become ovario-tubal. An interstitial pregnancy may become tubo-uterine, and a cornual pregnancy behave like an extra-uterine. Again, a tubal pregnancy may become extra-peritoneal—the tube opening up the broad ligament, probably generally by rupture where the folds of the ligament separate to enclose the tube. You know that an ovarian tumour may in like manner open up the broad ligament and become extensively extra-peritoneal." Turning to Dr. Matthews Duncan's Clinical Lectures this extraordinary mass of confusion is explained. Dr. Duncan does not yet know the difference between a cystic tumour of the ovary and an embedded cyst of the broad ligament, and I feel hopeless that he ever will.

Some of Dr. Duncan's assertions on the subject of ectopic gestation are made with all the clearness and decision which he claims for audacious ignorance, and my mind is greatly puzzled whether the greater respect is due to audacious ignorance or ignorant audacity. "The original site," says Dr. Duncan, "of an extra-uterine gestation is determined by the insertion of the placenta. There is no other site of placental insertion but the original site—no reason to believe that the placenta ever does or ever can change its site. It cannot be transplanted. Authors of experience have believed that it can be transplanted," &c., but these poor persons, of whom I am one, are waved behind him, by a Podsnappian gesture, and the poor placenta must perforce return to its original site. But I have caught it in the act, over and over again, surreptitiously leaving its original site and fastening its octopus-like villi into strange and new places. I have caught it before it had time to retrace its steps and hide Dr. Duncan's shame. *E pur si muove.*

Dr. Duncan continues, "Were transplantation of placenta possible, many cases of abdominal pregnancy, or all cases,

might be called secondary ; and this would increase the predominance of tubal, and give a fine appearance of simplicity." This is precisely the case and it is the extraordinary simplicity of the theory which is at once its recommendation and its gain. It is the same simplicity which floors Podsnap, who comprehends neither simplicity of motive nor directness of action.

"These remarks," continues our lecturer, "are to be applied to extra-peritoneal pregnancy also, that is when the ovum grows between the layers of the broad ligament, separating them and reaching the parametric cellular tissue. The placenta cannot be transplanted into the cellular tissue." These two sentences of course contradict one another and Podsnappery defeats itself. It has seen Hart and Carter's plates without understanding them—it is intellectually blind.

A few more of Dr. Duncan's views may be commented on because they are mere statements in direct opposition to every known fact. Thus, "A tubal gestation generally ruptures, but not always." Can he produce a specimen, after the period of rupture (say the fourteenth week), which has not ruptured? Dr. Duncan has published one case of extra-uterine pregnancy of a character quite unique ; but its value does not lie in this direction, as I have had occasion to show. Towards the conclusion of his lecture faint gleams of light seem to have permeated his mind, but even then so obscured by prejudice that they must have misled rather than helped his hearers. "In general it is laparotomy (by which he ought to have explained to the University graduates among his audience that he meant linear abdominal section and not an incision in the neighbourhood of the kidney) you have to consider. When the foetus is already viable or further advanced you will think of early laparotomy and keep in mind the great danger of hæmorrhage in the separation of the placenta, which you have no satisfactory means of arresting."

Dr. Duncan is not an authority on abdominal surgery and therefore he ought to accept the statements of those who are, that there exist perfectly satisfactory means of arresting such hæmorrhage in the use of perchloride of iron.

His conclusion is still more remarkable when he formulates his opinion as to "What will be the ultimate result of the present enthusiasm for abdominal surgery no one can foresee. In extra-uterine gestation much has yet to be done before the utility of laparotomy can be well defined. We need more knowledge of the natural progress of the disease, more knowledge of the anatomy, more experience in laparotomy. Already surely much is to be gained by judicious laparotomy and more is to be expected in the future."

About twenty years ago a decayed old ostler of one of the old city inns used to hang about the scenes of his youth. Broken-down stages lay about the yard, useless, and the old man went about apologising to such stray visitors, as, knowing him not, would listen to him, apologising for some strange and unforeseen accident which delayed the arrival of the York coach. Poor old Judkins!

How strangely different the words of the modern railway conductor, Lush by name. His recent paper is one long and judicial examination, with final exordium, not of what I claim as my own, but what I claim for British surgery, the merits of which are so grudgingly withheld and the views of which are so stupidly misrepresented by Dr. Matthews Duncan.

Within the last few days we have had what may be termed, by a stretch of courtesy, a debate on "Ruptured Tubal Pregnancy" at the Royal Medical and Chirurgical Society, based on a short paper contributed by Mr. Bland Sutton, and upon this paper and some of the speeches in the debate I wish to make some comments.

In the first place Mr. Bland Sutton gave very marked prominence to an ordinance with which I entirely agree, that cases of intra-peritoneal hæmorrhage should not be classed as instances of ruptured tubal pregnancy unless some evidence of foetus or membranes were forthcoming. He was pleased to find so many speakers agreed with him; indeed, some speakers seemed to have this string only upon which to play. With all this, as I have said, I entirely agree. But I

want to know what necessity there is for all this energetic denunciation. Where are the cases and by whom published, which have been regarded as being and asserted to be cases of ruptured tubal pregnancy without some evidence of foetus or membranes? I have been watching the literature of this subject most closely for the last fifteen years and I have not seen any such case published, and it would be very much fairer if the denunciators would point out the delinquents.

Before I go further let me point out that Mr. Bland Sutton seems to limit his proof to the foetus and membranes, but I suppose he includes with the latter the placenta; and that it is a mere omission of the pen that he has not specifically mentioned this, the most important proof of all. I point out this markedly, because in his reply he considered it unjustifiable to say in these negative cases that the foetus had been dissolved, but cases in which embryos were not found should be put in a class by themselves—until a true cause for them could be found. Here it does really seem as if he had forgotten all about the placenta. Let me say, as the writer who has had now the largest experience of these cases, that in the majority of instances the embryo escapes at the first rupture into the peritoneal cavity and is then lost, is never found and must be digested, for it never does any harm.¹ Similarly the membranes are very rarely seen, but the placenta and its traces are irremovable, because its site is uniformly the bleeding point and microscopic investigation always reveals its villi permeating the muscular walls of the tube. I have now published forty-five cases of ruptured tubal pregnancy and in every one this proof has been obtained and can be obtained, for I can put my fingers on every one of the preparations if there is any dispute concerning the fact. Every one of these preparations has been publicly exhibited and discussed at meetings of the British Medical Association, the Midland Medical Society and

¹ See on this point the most interesting case recently published by Dr. Byrom Bramwell in his "Clinical Studies," where the foetus is seen to have escaped in this way, and the rupture is actually closing over the retained placenta.

the British Gynaecological Society. I have for some time past ceased to make any communication to the older metropolitan societies, for I found that to do so was only to subject myself to much bullying by the chairman, that to ask for a committee of investigation of my specimens to corroborate or correct my statements was only to meet with a curt refusal, and finally my papers were refused publication.

I was specially invited to be present at the hearing of Mr. Bland Sutton's paper, but I need not say that after such treatment I did not avail myself of it. Although I have been for years a member of these societies, I find that the area of publication through them and the advantage of public criticism are denied to me.

To return to the debate of Mr. Sutton's paper, it was most remarkable for the habitual confusion in the minds of most of the speakers concerning the two varieties of hæmatocele, intra-peritoneal and extra-peritoneal. I have now seen *post-mortem* examinations or surgical operations performed on over eighty cases of intra-peritoneal hæmatocele (I do not include a few cases where the origin was traumatic, or from a ruptured liver, or from the slipping of the knot on a pedicle), and in every one of them the cause was a ruptured tubal pregnancy. I may, therefore, be fully excused when I say that I am entirely sceptical about the statement made by Dr. Cullingworth that intra-peritoneal hæmatocele might occur from numberless causes. If it does where are the recorded cases and what are the proofs?

Dr. Cullingworth speaks of a case in which on abdominal section a considerable amount of soft, dark clot was found encysted *in* the peritoneum. He must have meant encysted *by* the peritoneum, that is the peritoneum raised over it by the effusion—an extra-peritoneal hæmatocele, such a case as was immediately after typically described by Dr. Walter, "a dark-coloured elastic tumour, reaching nearly to the umbilicus." In this case the foetal remains were found at the base, and the case was clearly a broad ligament hæmatocele, resulting from the rupture of a tubal pregnancy. Dr. Walter's case was pre-

cisely the kind in which abdominal section was *not* wanted, quite the case to get well by nature's own process.

The origin of Dr. Walter's case was precisely that of the case jointly alluded to by Dr. Matthews Duncan and Dr. Priestley, in which the patient was suddenly seized with symptoms of hæmatocele, but where operation was, most properly, not performed. Eight months after a dead foetus was extracted from the cavity of the broad ligament, into which the tube had ruptured at the time of the original attack. This is quite the case in which operation at the time of rupture is *not* required, indeed would be most improper, and the pregnancy ought always to be allowed to go on. But the case ought to have been interfered with about six months after and not eight, for at the end of six months a living child might have been extracted.

Dr. Priestley introduces a new nomenclature for hæmatocele. He speaks of a "pure" hæmatocele. What is this? Still more patiently we wait to know when a hæmatocele may be regarded as impure. He says, "In pure hæmatocele the patient usually gets well, but if the case were interfered with by operation it was liable to go wrong, either from the direct results of the operation or from subsequent hæmorrhage." Now this is precisely the truth concerning extra-peritoneal or broad ligament hæmatocele, but why is it to be called "pure" hæmatocele? "Such cases should be interfered with only when suppuration took place." This may mean when it becomes impure. Then we must speak only of pure and impure extra-peritoneal hæmatocele, for intra-peritoneal hæmatoceles never suppurate. Of the confusion on this subject indicated by the utterances of Dr. Duncan it is almost impossible to speak with patience. He begins his speech with my name, and therefore I have a right to answer him; and, he says, "These enthusiasts for operation taught that there was no such thing as a hæmatocele, except those produced by ruptured tubal pregnancy, whereas it was known that hæmatocele was common even in virgins." By the omission here of the words "intra-peritoneal" and "extra-perito-

neal" as defining two wholly different diseases, different in their origin, in their pathology and different in what they demand for treatment, wide as the poles asunder, Dr. Duncan makes these enthusiasts say exactly the opposite of what they have been shouting on the housetop for fifteen years. Dr. Duncan is in the dilemma either of wilful and mischievous representation or of dullness of apprehension which is beyond the measurement of mental possibility. I think it must be the latter, for he confesses that he, a man who abhors operations, urged operation in a case of broad ligament hæmatocele, a proceeding which the enthusiasts condemn. Dr. Duncan is of course at liberty to lecture upon his incomprehensible pathology and to advocate his bad surgery as much as he likes, but he has no right to put them in the mouths of people who object to them and condemn them unceasingly and emphatically.

Mr. Bland Sutton's suggestion that the cause of rupture of a tubal pregnancy is an apoplectic change in the ovum belongs rather to the transcendental order. In the first place it cannot possibly be regarded as an explanation—at best it is only carrying the process one step forward. If the apoplexy is the cause of the rupture, something must be the cause of the apoplexy. It seems to me that the suggestion is clearly based only upon the one case with which he has had experience and it is diametrically inconsistent with the fact that no preparation has yet been exhibited in which a rupture of a tubal pregnancy has not taken place at a date earlier than the thirteenth week, and the majority of the preparations exhibit no apoplectic conditions whatever. Microscopic investigations of one injected and many non-injected specimens which I have made and the results of which I have published over and over again show that the implantation of the placental villi in the wall of the Fallopian tube involves an enormous increase in the diameter of all the vessels of the structure of the tube, just as results when the placenta implants itself in the uterus, or upon intestine, or upon abdominal wall or elsewhere. Microscopic investigation and the complete injection of specimens removed which I have succeeded in preparing show that it is at the

very spot where the substance of the tubal wall is thinned out by these enlarged vessels that the rupture invariably occurs, and in the very last specimen which came under my care for the purpose of operation the rent in the tube is no larger than a pellet of wheat, but the enlarged vessels at the point of rupture could be seen when the specimen was fresh by a low power lens with perfect ease and there was not the slightest apoplectic effusion in the ovum, which is certainly not more than five or six weeks' growth. That a primary effusion of blood into the ovum cavity might precede the actual rupture of the tube now and then is likely enough, but the suggestion that the cause of rupture is apoplexy of the ovum is simply a proposal to put the cart before the horse.

If Mr. Bland Sutton, and those who took part in the so-called debate, had read a short paper in the *Edinburgh Medical Journal* for last month by Dr. Berry Hart, they could scarcely have failed to have risen to a higher level of accuracy in their statements than was attained. A few sentences from that paper so absolutely confirmatory of what I have said and repeated at intervals for years past, are worth while quoting here. The first is as follows:—"As all know, the Fallopian tube is in the vast majority of instances the starting point of an extra-uterine gestation; the most common result of this is that rupture occurs usually at the second month, through some part of the tube covered by peritoneum, a result almost invariably fatal if left alone, and as invariably curable if operated on in time by abdominal section.

"A rarer termination in Fallopian tube gestation is, that further development takes place between the layers of the broad ligament, which become separated to accommodate foetus and placenta. Even here rupture into the peritoneum may occur, but if the peritoneum remain intact we may get a continuance of development."

He then goes on to prove the utter inaccuracy of Dr. Matthews Duncan's statements that the placenta cannot be transplanted and cannot be moved, and cannot be implanted on cellular tissue by giving the evidence of his own homolo-

graphic sections, which Dr. Duncan quotes, but does not understand. He shows that this displacement may occur even to the extent of ten inches in distance and beautifully explains how, "Inasmuch as this amount of displacement was accomplished in about as many months there was never any gross separation, but a microscopic progress which, as we shall see, causes slow blood effusion and organisation."

He shows by drawings of actual specimens that the large sinuses which I have described as formed in the muscular walls of the tube had actually occurred, that the villi in this way are compressed, the serotina is destroyed, and therefore the relation between mother and foetus so interrupted as to give the explanation of the numerous deaths of extra-uterine children.

This villous compression and the inevitable subsequent epithelial destruction are in all probability, as is clearly pointed out by Dr. Berry Hart, the predisposing causes of the actual apoplectic effusion which is sometimes seen in the future transplantation processes of the placenta; but there is nothing in my own preparations, nor do I see anything in Dr. Berry Hart's observations which justifies me in the belief that this actual process to which there exists abundant enough evidence in the post-rupture period of tubal pregnancy is to be asserted as in any way the immediate or even the indirect cause of tubal rupture. The direct cause is villous implantation and the growth of the sinuses in the muscular coat of the tube, whilst the immediate and direct cause of rupture is generally some slight strain or accident.

A Hystero-Psychosis.—A Case of Retroversion: Insanity, Replacement, Cure. By R. C. BENINGTON, M.B., B.S.

Cases of reflex nervous disturbance, the class of so-called hystero-neuroses are of so common occurrence in gynaecological practice that it is difficult in our present state of knowledge to say what symptoms may not arise from

uterine or ovarian irritation, and I believe that, as the science of gynæcology advances and examinations are made more frequently, or the results of examinations are more carefully recorded, and as our powers of discernment of slight deviations from the normal increases and their import is better appreciated that in a much larger proportion than at present accepted such deviations will be found to exist and that we shall be able to recognise some condition to account for symptoms about which at present we are not clear. One characteristic of nature of reflex neuroses is that the symptoms disappear without other treatment on removal of the cause of irritation.

In the enlarged and tender mammæ preceding the menstrual flow, in the gastro-intestinal derangements, headache and pains accompanying endometritis and other pathological conditions of the body and the cervix, in the vomiting and chorea of pregnancy, we see instances of reflex irritation giving rise to symptoms at the periphery, whilst in the depression of spirits preceding menstruation or accompanying pathological conditions we have examples of the effect of peripheral irritation on the centres which preside over the higher functions of the brains or hystero-psychoses. The exact character of the phenomena witnessed varies with the idiosyncrasy of the patient, and the so-called "explosions of accumulated nerve" force or inhibition of function takes place in the direction of least resistance. Clinically, by almost imperceptible degrees we see these conditions become exaggerated until we have cases of melancholia or mania chorea or epilepsy. The case I have the honour of bringing before the Society to-night aptly illustrates this exaggerated condition.

On May 29th, 1880, I was hurriedly called to attend Mrs. M. in her confinement. I had not been previously engaged by her. I found her lying on a bed bearing down, straining and groaning. She expressed herself pleased that I had been found at home; said she was sure labour was far advanced and that I could help her. On raising the clothes the menstrual odour was so apparent that I at once was doubtful as to

her condition. An examination verified my doubts. I found the uterus completely retroverted with a considerable degree of flexion. It was with difficulty I could feel the os. The fundus was almost pressing on the perinæum. The whole uterus was freely moveable when she did not strain. I easily replaced the uterus and inserted a large Hodge's pessary of vulcanite. Immediately the operation was completed the woman gave a great sigh of relief, said she felt comfortable and thanked me most voluminously. I said nothing to her about her condition. This was about three o'clock in the afternoon. On going down stairs I saw the husband and some female friends. I gathered the following information: that they had been married about two years; that she had not had a child. The husband, whose mental brilliancy was not of the first order, did not seem to know much, but he told me that she told him some time ago that she was pregnant, and as he knew nothing about such things, he supposed she was. She made the necessary preparations for the child, notwithstanding the laughter of her neighbours, who assured her she was not pregnant. I gathered also that she was of a silent, taciturn frame of mind. On paying an evening visit to her, I found her quite comfortable, but she averted her face and seemed as if she felt rather ashamed.

Suddenly she looked at me and said, "Doctor, where's the child?" I smiled at her and she said, "Is it really true, then, what these women tell me—that I have not had a child?" I assured her it was so, and she made some remark about not understanding it.

The next day her mind was perfectly clear; she again made some remark about not understanding it, and said: "At any rate, whatever you did to me, I feel quite different now." Next day I told her to get up and think no more about it.

I saw her every day till June 3rd, on which day I explained her condition to her and made an examination to satisfy myself as to the position of the uterus and pessary. I found the axis normal and easily passed, the sound with the pessary *in situ*. At this visit she laughed at her previous

conduct and was perfectly sane. I therefore took my leave of her, telling her to come and see me occasionally. In the evening the husband came, paid my bill, and thanked me, saying that his wife was more herself than she had been for long. I saw nothing more of her and passing the house one day noticed it was shut up.

Some time after this I met the husband, who I could see wished to avoid me. I, however, spoke to him and he told me that a few weeks after they had moved she again began to be silent and depressed with delusions of various kinds, that he was afraid my fees were too large for him to pay, and that at the advice of neighbours he had called in another doctor, who certified her as insane, and she was removed to an asylum. I expressed my regret at the circumstances and we parted.

On July 2nd, 1884, he called upon me and told me that in consequence of his being in a better position and wishing for his wife at home he had made application for her discharge—I only give his story as he gave it to me—and that she had come home. I asked him how she was, but the only answer I could get was—"Will you come and see her?"

Accordingly I went. The husband ushered me into the room in which she was sitting by the fire gazing into vacancy. He said: "Here is Dr. Benington come to see you again," but she took no notice, and it was some time before I could induce her either to speak to me or look at me. She looked the very picture of melancholia. Her husband told me she was always like that, "brooding," and would do nothing all day long. I asked her chaffingly if she was pregnant again, and she answered to the effect that she had her own opinions and would not speak to me.

At last, we got a neighbour in, and she was induced to allow me to examine her. There was a foul discharge from the vagina. The uterus was displaced backwards; I could not pass the sound while the pessary was in. The tissues were somewhat grown round the instrument, and there was slight bleeding on its extraction.

I ordered her to use injections of Condyl's fluid for a couple

of days. On July 5th, I replaced the uterus and put in another pessary. She at once expressed herself as more comfortable. I saw her at intervals till September 12th, 1884. By this time she had become, so to speak, like another woman. Her despondency had to a great extent vanished; her mind was clear, looking happily forward to the future. Marital intercourse satisfactory to both parties had taken place, and she was taking an interest in her domestic duties.

I saw her again on February 27th, 1885, and found the pessary quite right, and the uterine axis normal. She was then quite well and happy, and though not bright nor particularly intelligent, the husband said she was better than he had known her since they were married.

I saw her again on September 16th, 1885, when her condition was the same. I have not seen her since.

The effect of displacements of the uterus as a cause of this class of disorder has frequently been written of, but in no case on record have I been able to find so distinct an account of the symptoms and cure by mere replacement, unless it be the one recorded by Fordyce Barker, in the *Journal of the Gynæcological Society of Boston*, 1873. Apart from its clinical interest the case is interesting from a medico-legal point of view, and makes one desirous of information as to the uterine condition of female patients in general in our lunatic asylums.

I fear, however, some time will yet elapse before we shall have reliable information on this point.

Clinically it is of interest as showing the direction of least resistance to perverted nervous energy in this silent, taciturn woman. The uterus had evidently been displaced for some time, as indicated by the symptoms of reflex peripheral irritation, depression of spirits, melancholia and delusions. That these symptoms became aggravated at the menstrual epoch, culminating in an abortive labour, is also worthy of note, and the very evident and immediate relief afforded by replacement of the displaced organ. Although it is very evident that, owing perhaps to a little extra work at the time of her

change of residence, the uterus soon took a backward position again (doubtless owing to the fundus falling behind the post bar at the point of flexion, yet it kept the uterus from again assuming the exaggerated position it had when she first came under notice, and so kept it for four years. The pessary last inserted seemed to remedy the remainder of the displacement.

The Society then adjourned.

BRITISH GYNÆCOLOGICAL SOCIETY.

WEDNESDAY, DECEMBER 11, 1889.

FANCOURT BARNES, M.D., VICE-PRESIDENT, IN THE CHAIR.

Adjourned Discussion on MR. LAWSON TAIT'S Paper.

Dr. EDIS observed that it was seldom that their Society had been called upon to listen to such an eloquent address as that delivered by Mr. Tait. Such a statement, coming from one in such a singular position as he was to lay down the law, was most valuable, and advanced materially our knowledge of the subject. Dr. Edis endorsed the views expressed by Mr. Tait and agreed that only the most arrogant ignorance could make such statements as those refuted. He thought that Mr. Tait deserved well of the Society in taking upon himself to answer the question as he had done.

Dr. BARNES said that the address contained so many points deserving of attention that he should adhere to the order in which they arose. The first point was that of intra-peritoneal hæmatocele. He thought that there were other causes independently of ectopic gestation, though they might be rare. He had seen one or two, though he had no direct evidence; but still they had been unable to find any evidence of foetus or membranes in cases in which there had been large collections of blood in the peritoneal cavity, traced to varicose veins in the broad ligament. He concurred in the opinion expressed by Mr. Bland Sutton, and adhered to by Mr. Tait, that they ought to defer classing cases as of ectopic gestation until they found either the membranes or the ovum. He said that the ovum undoubtedly underwent decomposition and disintegration. He had seen this process going on and he had seen the remains. He thought that Mr. Tait had wasted a

good deal of energy upon the statements contained in the anonymous articles in the *Lancet*, the writer of which took advantage of his anonymity to put forward views which he would certainly not dare to put forward under his own name. There were topics and persons which he would like to touch with respect, but for many years the respect had been diminishing almost to a vanishing point. Passing on to consider the movement of the placenta, he said he was convinced that the placenta might and did change its site and that to a marked extent. Some cases of ectopic gestation could not be explained in any other way. All that he had seen tended to confirm the views he formerly held on this subject, viz., that the villous structure of the chorion spreads, and that the villi which would normally wither up and disappear did, under certain circumstances, graft on afresh on pastures new. That was how they explained some cases of placenta prævia. When the surface high up was unsuited, for any reason, to receive the villi, the growth took place lower down and so the placenta became prævia. He pointed out that at one period the whole of the circumference of the chorion was surrounded by villi capable of growing and developing into placenta. Many years ago he had performed the *post-mortem* examination of a woman who had died from hæmorrhage during labour, and on examining the uterus they found that there was not a square inch of the interior of the uterus that was not covered by this villous growth. He had taken the preparation to the College of Surgeons, but he was afraid that it had not been preserved. In that form of ectopic pregnancy where there was abdominal gestation he had stated years ago that he doubted whether it ever existed as a primary condition. He thought it always arose from rupture of a tube. It was not a transplantation exactly, but a stretching or extension of the growth. He recollected a case of rupture of an ovarian cyst. They were in time to save the patient, though there was rupture of the cyst and hæmorrhage. The tumour was universally adherent and consequently there was a good deal of bleeding. He swabbed the bleeding surface over with perchloride of iron

and the bleeding ceased and the patient recovered. That was a remarkable case, but by no means a solitary one. He said that, of course, a man who never opened an abdomen could never see those things. The distinction between Priestley's "pure and impure" hæmatocele was simply nonsense. He then discussed Mr. Sutton's views on the apoplectic ovum, and said that he had studied the ovum in its changes, especially the so-called apoplectic ovum, but he had never looked upon it as primary. It was not at all necessary, as Mr. Tait had pointed out, that there should be extravasation into the ovum or membranes. A theory that he had often dwelt upon, though there was no proof in support of it, except that they might reason from analogy, was that when the ovum was growing it became implanted into the decidua which grew with it, so that there was no bleeding. If, however, the implantation went beyond the spot where there was a natural adaptation for the reception of the villi, then the delicate vessels were ruptured and there was hæmorrhage. That was the history, he thought, in many cases of placenta prævia. It was, so to speak, an ectopic gestation. It was implanted on a portion of the uterus, which could not grow so as to accommodate itself, and a period came when the placental growth outstripped that of the uterus. Comparing that with tubal gestation the catastrophe occurred earlier, because the tube was essentially unfitted to receive the ovum at all. There was rupture, extravasation of blood, and the tube burst. That was the process that most often resulted in apoplectic ovum. The illustration given by Mr. Tait of the development of the vessels on a certain spot was only in accordance with the physiology of the parts. He said that gynæcology was now opened up and extended by surgeons, and the man who condescended to occupy the degrading position of obstetric physician to a hospital with his eyes bandaged and his hands tied behind his back; and then presumed to criticise others who went further, the position of that man was so utterly absurd that it ought to be denounced outright. It would have to be remembered in the future, if their adversaries complained of

the violence of their language, that the expression of "ignorant audacity" was originally used by Dr. Matthews Duncan. He said that no one had done more to obstruct the advance of gynæcology than that gentleman. He was the only professed gynæcologist in London who occupied such a degrading position of allowing his hands to be tied by surgeons. Such a man was reduced to teaching out of his own subjective ideas, and how he could consent to do this he was unable to conceive.

Dr. BANTOCK congratulated Mr. Tait upon the success with which he had overthrown the objections to his views on ectopic gestation. He said that if there was one person more than another to whom they were indebted for an extended knowledge on this subject it was Mr. Tait. He shared in the regret expressed by Dr. Barnes that Mr. Tait should have wasted time and energy in refuting the teaching of one who, if he had ever been an advanced student in gynæcology, had long since ceased to be so. He referred of course to Dr. Matthews Duncan, whose views showed him to be thirty or forty years behind the age. Unfortunately, although he had listened to the paper with attention, the reprint had only come into his possession that very evening, but there were one or two questions that came very prominently before him when the paper was read. It had long occurred to him that the use of the term hæmatocele had led to a great deal of confusion. Many years ago, on the occasion of the reading of a paper by their first president, Dr. Meadows, he had felt called to oppose the views advanced by the reader of the paper. He had gone through all the cases of Bernutz and Goupil, but had failed to find a single case of *post-mortem* examination in a case of what was called hæmatocele. Dr. Meadows founded his paper on one or two cases of rapidly forming tumour in the pelvis which projected downwards until it was nearly at the vulvar opening. He had remarked that such a hæmatocele must of necessity be extra-peritoneal, for an extraordinary distension of the abdomen would have been unavoidable to allow of such a thing happening to an intra-

peritoneal collection of blood. Yet in those cases the tumour was not discernible by the vagina. He had written a paper at the time which he often regretted not having published. He had concluded that it would obviate much confusion if the term hæmatocele were abolished or limited to extra-peritoneal effusions of blood. He recalled a remarkable case which occurred some years ago which helped him very much to arrive at a conclusion on the subject. She was an out-patient at the Samaritan Free Hospital, and there was very little evidence of mischief in the pelvis or within the vagina beyond a little fixation of the roof of the vagina. The patient died of hæmorrhage into the peritoneal cavity. When the abdomen was opened they found a large and characteristic mass of blood as high up as the splenic and hepatic regions, and of a crescentic shape, the body of the crescent being in the pelvis. It was evident that two hæmorrhages had occurred. The first hæmorrhage had been of small extent, and had been limited to the lower part of the abdomen as shown by the fact that all the structures were matted together. The second hæmorrhage had taken place below the line of the matting together, and bursting through the feeble connection had found its way into the peritoneal cavity, and so the woman bled to death. If the term hæmatocele were retained for cases of extra-peritoneal collections or, still better, the term hæmatoma, they would get rid of the confusion. With reference to the views of those who maintained that intra-peritoneal hæmatocele might arise from a variety of causes, including hæmorrhage from the kidney and aneurism, he pointed out that in the hæmorrhage from aneurism the result must necessarily be an extra-peritoneal hæmatocele, of which he mentioned a striking example in a case of aneurism of the abdominal aorta forming a retroperitoneal hæmatocele. The same was the case in hæmorrhage from the kidney, except in the result of injury. He thought, therefore, that all the evidence pointed to the causes of collections of blood in the peritoneal cavity being due in a large number of cases to the condition of ectopic gestation and its rupture. He entirely

agreed with Mr. Tait's objections to Mr. Bland Sutton's view as to the cause of rupture in these cases. He said that there was no evidence that apoplexy of the ovum occurred at all. Rupture was due to the rapid growth of the placenta, the walls of the tube being unprepared to encounter such rapid distension. With reference to the alleged transplantation of the placenta, he said that if Mr. Tait meant that the placenta at any time separated from its connections altogether and started growing elsewhere, then he could not accept his views on that point, for he believed that if the whole of the placenta were separated it was impossible for it ever to become attached again and grow. He mentioned a remarkable case of abdominal gestation, which was plainly originally a case of tubal gestation, the patient having escaped death at the time of the rupture of the tube, in which the foetus went on to full time. In that case the placenta was spread out over a large part of abdomen at the brim of the pelvis at one side and dipping down among the intestines and the broad ligaments. His explanation of this condition was that the tube had ruptured, the hæmorrhage not being enough to kill the patient, that the foetus escaped into the peritoneal cavity, the placenta continued to grow, and by its growth enlarged the opening of the tube into the peritoneal cavity: then it spread out like the roots of a tree, never once losing its connection with the Fallopian tube. In that way one could understand how the placenta could grow in every direction, implanting its roots and preserving the vitality of the infant.

Mr. O'CALLAGHAN said that he for one could not understand the idiocy with which certain gynæcologists treated the subject of ectopic gestation. He had followed Mr. Tait's cases almost from the beginning, and had read carefully the discussions thereon in the journals. He did not know whether it was stupidity or ignorance that led men to believe that those cases of ectopic gestation would get well without operation. A leading Dublin gynæcologist had said to him the other day that *all* would recover if left alone, and that there was no such thing as *fatal* intra-peritoneal rupture.

That this did occur, however, they might see for themselves. He was sorry that those who entertained these views did not see the last case of the kind upon which Mr. Tait had operated. When the woman was brought in she was in a state of absolute collapse, quite pulseless and blanched; the abdomen was distended. When the peritoneum was laid bare it bulged out, and immediately it was incised the flow of blood was like the jet of a hydrant. In a minute Mr. Tait had tied the bleeding appendage, and had removed the gestation, and after all this flow of blood he still had to remove quarts of tarry fluid. At that time *I* thought the woman was dead, but the operation was carried out, and ultimately the woman recovered. He thought that this case afforded sufficient proof of itself that rupture does take place into the peritoneum, and that unless operated on *at once* they would die. The "Block" that Matthews Duncan and others seemed to stumble upon was that of speaking of all ruptured ectopic gestations as purely *extra-peritoneal* hæmatoceles. Several cases had been brought before the Dublin Obstetrical Society, in which the decidua had come away, proving that they were cases of ectopic pregnancy which got well without operative interference, but on looking up the history they all proved to be positively *extra-peritoneal*, in which cases, Mr. Tait had pointed out, no immediate operation was necessary or even desirable.

Mr. LAWSON TAIT, in reply, thanked the speakers for the kindness of their remarks and for the vigour with which they had taken up his cause. In reference to Dr. Bantock's remarks that intra-peritoneal hæmorrhage might occur independently of rupture of the pregnant Fallopian tube, he admitted that this was possible, and he even knew of two cases in which death had occurred from intra-peritoneal hæmorrhage alleged to be due to other causes than rupture of the tube or ruptured kidney or liver. One was a case of ruptured varix of the broad ligament, a very rare occurrence, and the second case would be found also so recorded, under

the name of ruptured varix, by Dr. Brouardel. The case had, however, been brought to him (Mr. Tait) for a definite opinion, and it was satisfactorily established to have been a case of ruptured tubal pregnancy. Another rare cause was rupture of an aneurism, but only of the cæliac axis, which could not strip off the peritoneum and become retro-peritoneal. Rupture of an aortic aneurism would necessarily be retro-peritoneal. Those were the only exceptions he knew of. He quite agreed with Dr. Bantock in his remarks on the subject of the term hæmatocele, and he regretted that it would probably remain long in their nomenclature. The word had been invented by Nelaton, and it was utterly meaningless. Some words ending in cele had a precise pathological meaning, but this was not the case with the word hæmatocele. He thought that the term "pelvic hæmatoma," as signifying hæmorrhage into the broad ligament, would be an excellent innovation. At present he was lost in amazement, and ultimately amusement, that men could not be made to see what an enormous difference there was between effusion of blood into the broad ligament and effusion into the peritoneum. The difference must be obvious to the merest tyro in anatomy. The younger generation had taken up these views with avidity, but the older men seemed to deny that there was such a thing as a broad ligament. He thanked the Society for having afforded him an opportunity of saying certain things that had to be said, for it was impossible to allow an adept in an important medical society to pass with so many misrepresentations, and he had already explained how it was that he was debarred from taking up his own defence there.

In reply to Dr. Bantock's question as to transplantation of the placenta, he said that he quite understood that if the placenta ever became completely detached no replacement was possible of any part of it. He mentioned a case which recently occurred at Nottingham, in which they found the foetus at about the thirteenth or fourteenth week lying among the intestines. Three different hæmorrhages had taken place,

and two-thirds of the placenta was extruded from the tube, and on inspection it was quite clear that the part of the placenta outside had grown rapidly, while the part inside the tube was arrested in its development. In picking the placenta off the intestines he saw the villi being drawn out of the holes, whether old or new he could not of course say. The placenta had inserted itself through the peritoneum into the muscular coat, and they could see the little bleeding holes from which the villi had been pulled. Had he been a fortnight or three weeks later, he would probably have found the whole of that extruded portion of the placenta imbedded upon a site which was perfectly fresh. The process was the same as in the strangulation of an ovarian tumour; first there was slight adhesion, and gradually the ovarian pedicle disappears and the tumour was ultimately maintained exclusively from the omentum. So with the extruded placenta, which easily becomes re-implanted or it might undergo atrophy. The subject was being followed up with great care by Dr. Berry Hart, and he said that if anyone had specimens fresh enough to admit of this point being elucidated, Dr. Berry Hart would be glad to have an opportunity of examining them, and it would help to advance their knowledge on the subject. At present he asked the Society to accept a theoretical explanation based on observed facts. He hoped they would shortly be able to give a complete explanation of the nature of the movements of the placenta. This movement could not properly be called transplantation, but was rather what gardeners called "layering." Sections prepared by Dr. Berry Hart showed that in some cases the placenta had moved over an area of as much as eight or ten inches.

Dr. BANTOCK said the word transplantation was an unfortunate one, as it suggested a total separation.

Dr. BUER suggested "progressive transplantation" or "partial transplantation."

Dr. FENTON suggested that one explanation of the movement of the placenta might be found in the mobility of the parts, with which it was so apt to contract adhesions—the intestines, for example.

Adjourned Discussion on a Case of Insanity Cured by Pessary.

Dr. EDIS mentioned the case of a patient who some years ago had suffered from endometritis, for which he had applied nitric acid. Latterly she had suffered severely from neuralgia, and on examining her he found that there was partial atresia of the cervix, which he remedied by dilatation, when the neuralgia disappeared, and had not since returned. In another case of obstinate pain in the hepatic region it turned out to be dependent on some affection of the uterus. He also mentioned the case of a clergyman's wife whom he had been requested to examine, while in an asylum for insanity consequent on puerperal mania. He had found an acutely retroflected uterus, the reposition of which was the signal for the commencement of an improvement which culminated in her return to the ordinary duties of life. He said he could quote hundreds of cases in which violent excitement characterised the advent of the menstrual epoch. He pointed out that a large number of reflex neuroses in connection with the throat, the eyes, the stomach, &c., had their *point de départ* in the uterus.

Dr. BARNES said that these inter-relations were a common experience of everyday life. The same thing had happened to him more than once. One woman had remained four years in a private asylum without any improvement taking place, when he had examined her, and had replaced an acutely retroflexed uterus, after which she was soon enabled to leave the institution, and had remained in good health ever since. He asked why it was that crowds of women should be deprived of the benefits of gynæcological science when in asylums. He said that, of course, no one would pretend that all cases of insanity were due to uterine disorders, but even where it was unassociated with the cause of the insanity, treatment would often add materially to their comfort. He thought that a systematic examination ought to be made of the genital organs of the inmates of asylums by men specially trained, for a good deal of avoidable suffering might thereby be relieved.

Ætiology of Vesical Gangrene.

By F. W. NICOL HAULTAIN, M.D., F.R.C.P. Edin.

SLOUGHING of the bladder wall, though rare, has been the subject of much interest and debate in medical circles since so early a period as the seventeenth century, and even at the present time great differences of opinion seem to exist, both in regard to its pathological appearances and its ætiology.

Thus, having had the exceptional opportunity of meeting with two examples of the lesion, I thought it might interest the Fellows of the Society if I brought before them a few observations upon this rare and interesting condition.

From the title of this contribution it may, perhaps, be supposed that the subject hardly fails to be brought up at a gynæcological society, but if a glance be given at the table which I have put in your hands I think it will be evident how closely this lesion is connected with this special branch of medicine, fifty-one of the fifty-six cases which I have been able to collect having been distinctly stated to have been associated with either an abnormal condition of the female pelvic organs or with labour.

I will not occupy the time of the Society by going into any great clinical details of my cases. Both were women suffering from incarcerated retroposition of the gravid uterus, with retention of urine, which had lasted for about a month, and in whom the bladder was enormously distended, reaching to a level higher than the umbilicus.*

In the one case (*a*) the patient died of exhaustion before reposition of the uterus could be attempted, and only twelve hours after the retention of urine had been relieved by the withdrawal of 110 ounces of porter-coloured, offensive urine. By this means I was enabled to remove and examine the entire bladder *post-mortem*.

In the other case (*b*), after the withdrawal of about 100

* See Laboratory Reports, College of Physicians, Edin., vol. ii.

ounces of similarly offensive urine, the uterus was with difficulty replaced, and abortion took place the following day. After over a month's urinary incontinence, she suddenly was again seized with complete retention which lasted for four days, the distended bladder again forming an abdominal tumour which reached to the level of the umbilicus. On this occasion the retention was found to be caused by a large membranous mass which protruded from the orifice of the urethra, on the removal of which incontinence was again established. The patient is at present in excellent health, her only trouble being complete urinary incontinence.

On examination of the exfoliated sac (a portion of which I now show) it was found to measure fourteen by seven and a-half inches at its greatest diameters, and was from one-fifth to an eighth of an inch in thickness. Its external surface, with the exception of a smooth, white portion one and a-half inches square, was rough, brown, and soft, while the internal surface was hard and gritty like sandpaper, due to the deposition of urinary salts.

Microscopically at all parts three layers could be made out—viz :

1. Crystalline granular layer
2. Transverse muscular „
3. Longitudinal muscular „

while, at the smooth white portion already mentioned, two layers were superadded—viz., an old connective tissue layer (peritoneum) and a new connective tissue layer. The cellular elements of all the layers (with the exception of the new connective tissue) were in a state of advanced degeneration, and the blood vessels throughout the entire thickness were dilated engorged and degenerated, while surrounding them were everywhere evidences of cellular exudation and broken-down hæmorrhages.

The exfoliated sac then was nothing more nor less than the entire thickness of the bladder wall, and a small portion of the peritoneal covering, in a state of far advanced degeneration.

ÆTIOLOGY OF VESICAL GANGRENE.

FIG. 1.—Micrograph of section through entire thickness of bladder exfoliation ; $\times 12$.

FIG. 2.—Micrograph of section through smooth white portion of bladder exfoliation shewing (A) longitudinal muscular, (B) Peritoneal, and (C) new connective tissue layers ; $\times 100$.

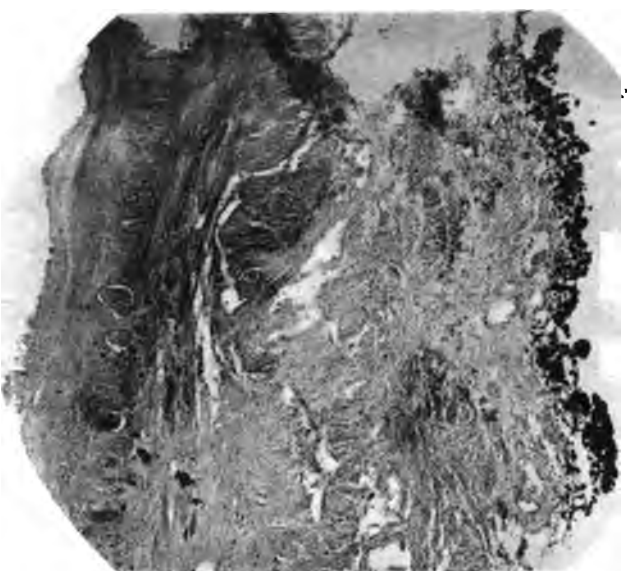


Fig. 1.

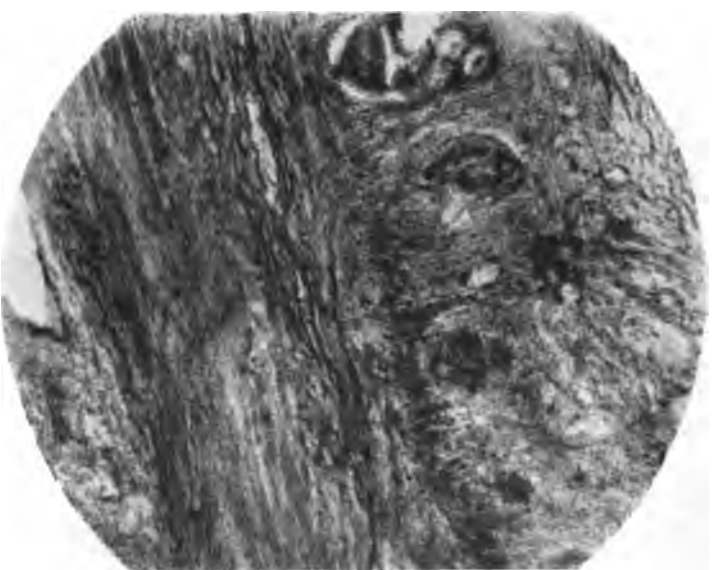


Fig. 2.

.....C
)B
)A

Microscopic examination of the bladder wall from Case *a* showed it to be in a similar, though not so advanced, state of degeneration as the specimen just described. In it the muscular fibres were swollen and without nuclei, the blood-vessels were dilated and engorged, and the tissue generally was densely infiltrated with cellular exudation. One or two of the vessels in the sub-serous layer were, however, filled with absolutely fresh blood corpuscles, while in this layer also were a few fresh hæmorrhagic foci—a point of much interest to be afterwards noted.

Evidently then, the lesion of the bladder wall in the two cases is identical—viz., gangrene. In *b*, however, the process is more advanced, as one would expect from the history of the cases, the entire thickness of the bladder wall (as is natural in examples of tissue death) having been cast off as a slough.

In *a*, had death from exhaustion not supervened, and had the incarcerated uterus been replaced, I have not the least doubt but that a similar exfoliation would eventually have taken place.

Examples of cases similar to these mentioned have been recorded in considerable number, as will be seen from the accompanying tables, but, unfortunately, details as to the structure of the bladder wall have been rarely noted. The cases of Madurowicz, Schatz and Krukenberg are, however, notable exceptions. In all cases in which the detailed structure has been recorded, an almost uniform condition to that which I have described in my cases has been met with, viz., a degenerated and infiltrated condition of the tissues affected, associated with dilatation and engorgement of the blood vessels and hæmorrhagic foci.

Curiously enough, although observers like Wells, Maunders, Frankenhauser and others have described cases of exfoliation, in which the entire thickness of the bladder wall has been shown to be present, they have named the lesion one of "exfoliation of the mucous membrane of the bladder," surely a by no means sufficiently inclusive title. Even authors of gynecological text-books give only passing reference to the

condition as one of croupous or pseudo-membranous cystitis. No doubt the disease is, in some cases limited to the mucous and sub-mucous coats, and in other cases there is met with a condition of croupous exudation on the surface of the mucous membrane, in both of which conditions the diseased tissues are shed *per urethram* ; yet to designate a condition, in which there has been shed the entire thickness of the bladder wall with a portion of the peritoneum, by any of the above titles is, I think, to say the least of it, misleading. A more inclusive title, such as "exfoliative necrosis of the bladder," might therefore be adopted with advantage.

The cause of this interesting lesion has been the source of much variety of opinion of rather a speculative nature. Some of the most commonly advanced theories may be quoted, viz. :

(1) Acute inflammation from the irritating action of retained decomposing urine.

(2) The unequal elasticity of the various coats of the bladder, causing tearing when the organ is over distended.

(3) Direct pressure of the retained urine upon the bladder wall, arresting the circulation through the organ.

(4) Interference with the arterial supply of the organ.

The first three, I think, may be at once put aside, when, by a glance at the table, it will be seen that retention of urine has not been present in all cases, as exemplified by those of Wells, Boldt and Mauer, while the fourth theory (Pinard and Varnier's) I think I will later be able to prove to be also inapplicable to all cases.

To what, then, can we look as a cause which can be shown to have existed in all cases? I think there is only one, viz., interference with the circulation.

To arrive at any conclusion on this point it will be necessary to consider firstly the normal circulation of the bladder, and secondly, in what class of cases the lesion has been met with. By this means we shall be enabled to ascertain if there be any conditions present which can account for an interference with the blood supply.

As regards the circulation I do not intend to go into great

detail. I should like, however, to draw attention to a most important fact, viz., that the entire circulation of the bladder, arterial and venous, passes through vessels situated at the base and neck, *i.e.*, the fixed portion of the organ—there being no collateral supply as met with in the uterus. M. Gillette* in a most exhaustive manner has described the veins of the bladder, and to his work I must refer if details be wanted. With regard to the arterial supply, it is entirely conducted through the superior, middle and inferior vesical arteries, all of which reach the bladder at its neck. From this peculiar disposition of the blood vessels it will be evident how comparatively easy it would be to arrest the circulation of the organ by localised pressure at the base and neck.

In considering the class of cases in which this lesion has been met with it will be seen from the table that all have been associated with one of two conditions :—

- . (a) Retention of urine, or
- (b) Labour.

In some of them both have been present.

In the large majority of cases in which the retention of urine has been independent of labour, it has been caused by retroposition of the gravid uterus, viz., in thirty-three out of the fifty-three cases met with in females.

To these two conditions, then (retention of urine and labour), must we look for the cause of arrest of the circulation.

That retention of urine alone is sufficient to cause a state of necrosis of the bladder wall (as met with in the cases described) had been shown by May of Giessen.† He, by a series of experiments upon dogs, in which he caused complete urinary retention by the introduction of tents into their urethræ, found an exactly similar state of the bladder wall was produced to what I have described, viz., extensive cellular exudation, and hæmorrhages, throughout the entire wall, followed by coagulative necrosis, evidence of extreme congestion.

* “ Sur les Veines de la Vessie.”

† Inaugural Dissertation. Giessen, 1869.

Section A.—SIMPLE GANGRENE OF BLADDER IN FEMALE.

	NAME.	CAUSE.	CAUSE OF DEATH.	REFERENCE.
1	Dray	Gravid retroposition and retention	Peritonitis	Med. and Phys. Journal, 1860, p. 456.
2	Haultain	Do. Do.	Uræmia	Case A.
3	Bamberger	Do. Do.	Do. ?	Thesis prix Caparoux Elleaume, Paris, 1860, p. 64.

Section B.—GANGRENE OF BLADDER WITH PERFORATION.

4	Van Doeveren	Gravid retroposition and retention	Perforation on 23rd day	Observat. Acad. Groningæ, 1765, p. 83.
5	Hunter	Labour 3 days. Retention 3 days	Do. 6th "	Med. Observat. and Enquiries, 1771, Vol. IV., p. 58.
6	Lyner	Gravid retroposition and retention	Do. 15th "	Do. do. do. p. 388
7	Naumburg	Do. Do.	Do. 28th "	Stark's Archiv., 1796, Vol. VI., p. 381.
8	Saxtorph	Do. Do.	Do. 21st "	Gesammelte Abhandlungen, 1803, Vol. I., p. 261.
9	Moreau	Do. Do.	Do. 50th "	Archiv. für Gynæcologie, Bd. XVI., p. 341.
10	Litzmann	Extra-uterine foetation and retention	Do.	
11	Sorthey	Gravid retroposition and retention	Do. 18th "	Lancet, 1871, Vol. I., p. 610.
12	Schwartz	Do. Do.	Do. 37th "	Centralblatt für Gynæcologie, 1880, Vol. 6.
13	Crainix	Do. Do.	Do. in a month	Traite Pratique des Accouchements, 1883, p. 230.
14	Valenta	Do. Do.	Do. on 15th day	Memorabillen, 1883.

	N
15	Tulpus
16	Martyn
17	Wells
18	*Wells
19	Whitehead
20	Godson
21	Barnes
22	Phillip
23	Wardell
24	Schatz
25	Molden
26	Franken
27	Luschka
28	Brandeis
29	Bell
30	Maunders
31	Zeitfuchs
32	Whittich
33	Hausman
34	Maduro
35	Hurry
36	Hewitt
37	Aveling
38	Pinard
39	*Boldt
40	Haultain
41	Walters
42	Baynham
43	Lever
44	Univ. C
45	*Mauer
46	Doran
47	Ritter
48	Klein
49	Lemaire
50	Dubart
51	Rosenph
52	May
53	Kruken
54	Lee
55	Wilks
56	Liston



The hæmorrhages, he has also shown, were especially abundant in the mucous and sub-mucous layers and at the apex of the organ.

This congestion has been attributed to be due to the direct pressure of the retained urine upon the vesical wall, an explanation with which I am not prepared to agree; firstly, because direct pressure on the wall would tend to cause anæmia rather than congestion, and secondly, there is little or no counter pressure to be met with at the body and apex of the organ, and thus compression must be absent.

What seems to me a more likely explanation is that the pressure from the retained urine would act upon the base and neck of the organ where it is fixed and where external counter pressure would thus be met with. By this means, therefore, the veins, which all pass through this portion, would be constricted, and the circulation become arrested, giving rise to the congestion of the organ met with.

That the veins should primarily be affected requires little explanation:—

Firstly, from their want of resiliency.

Secondly, from their absence of blood pressure, and

Thirdly, from their superficial situation.

From the blockage of the veins at the neck and base of the organ, it will be evident how we have set up a congested state of its walls associated with fibrous exudation and hæmorrhages and terminating in necrosis—a seemingly satisfactory explanation of the cause in the cases described.

That the lesion is caused from compression of the arteries by the incarcerated retroversion, a theory advanced by Pinard and Varnier, is, I think, negatived by the fact (as shown in the drawing) that in specimen from case *a*, there are in the subserous layer recent hæmorrhages and a few vessels filled with fresh blood, evidences of a return of the circulation after the bladder had been emptied, although the retroposed uterus remained *in situ*.

With regard to those cases which occurred after labour, although no retention of urine was ever present, blockage of

the circulation of the bladder can be accounted for by the compression of the lower part of that organ between the foetal head and bony pelvis. By this means, not only the veins but the arteries specially will be compressed, and a state of total anæmia of the organ result.

As a consequence of this anæmia, changes will occur in the vessel walls, which, upon the re-establishment of the circulation, will allow of serious exudation, diapedesis and hæmorrhages, followed by subsequent coagulation, degeneration and death of the tissues involved.

That this is no mere theory, the experiments of Heubner of Leipzig prove.* He, recognising the peculiarity of the vesical circulation (*i.e.*, its want of collateral blood supply), was enabled, by tying a ligature round its neck (in rabbits) to entirely arrest the circulation through the organ. Upon allowing the circulation to continue, after an interval of only two hours' stoppage, he found, in the course of a few days, the bladder wall to be in a state of coagulative necrosis, the result of congestion, exosmosis and diapedesis.

From the above, therefore, it will be evident we have an explanation sufficient to account for the gangrene in all cases viz., arrest of the circulation from pressure on the base and neck of the bladder.

In the retention of urine cases it is caused by primary compression of the veins, and is thus slow and passive in its production, while in the labour cases it is due more especially to constriction of the arteries, and is thus more rapid and active.

It will be noted from the table that a number of the cases following labour have been associated with retention of urine. The lesion in these cases is probably the result of the compression of the vesical neck during labour, the retention being only a sequence resulting from the serious changes in the bladder wall causing paralysis of the muscular coat. That this is so, is I think, supported by the fact that retention of

* "Die Experimentellen Diphtherie." Leipzig, 1813.

urine is not immediately manifested, but occurs as a rule after the first twenty-four hours of the puerperium, that is after the circulation has been sufficiently long re-established to allow of the exudation above described.

It is probable that in a number of the cases which occurred after labour, no retention of urine was present, but unfortunately in those of Wells, Boldt, and Mauer alone has this been specifically stated.

If such, then, be the cause, the question naturally arises, why is gangrene of the bladder not met with more frequently, retention of urine being by no means uncommon, while labours are of hourly occurrence?

To this I can only say that the retention requires to be very prolonged, four days being the shortest period recorded, and it also seems to be favoured by the association of an impacted mass in the pelvis intimately connected with the base and neck of the bladder, which acts primarily as a point of resistance to the distension of the organ, and secondarily by itself helping to compress the vessels. (In thirty-six out of forty-one published cases a pelvic mass was present.)

When the result of labour, it must be due to an abnormal mechanism whereby the bladder neck becomes jammed between the foetal head and the bony pelvis.

That the lesion may be of varying grades of severity there is no doubt; in some cases the epithelial structures alone suffer, and are shed off *en masse* so changed and degenerated as to resemble a false membrane; in others the mucous and sub-mucous coats only participate, also being so degenerated that, except for the existence of elastic fibres, any evidences of the original structures are unrecognisable; while lastly, as has already been shown, the entire thickness of the bladder wall may become affected and exfoliated. All, however, seem to be examples of one and the same process, viz., coagulative or exudative necrosis.

That a partial necrosis should be most frequently met with is to be explained by the fact pointed out by M. Gillette that the veins of the mucous and sub-mucous coats are specially

numerous, and are of extreme delicacy. By this means their walls will become more easily affected, and excessive exudation will more rapidly occur—a point corroborated by the experiments of May and Heubner. Thus from a blockage of the circulation insufficient to cause destruction of the muscular coats, we may have a condition of complete necrosis of the mucous or sub-mucous layers.

Before closing I should like merely to say a few words on the composition of the sac which remains after exfoliation of the entire thickness of the bladder wall.

This is formed by the agglutination of the surrounding structures (such as the uterus, intestines, abdominal wall, &c.), around the necrosed bladder. From this agglutination by inflammatory lymph a secondary sac of young connective tissue is formed and a line of demarcation subsequently developed around the dead tissue, which is eventually cast off as a slough. (See cases recorded by Krukenberg and others.) That such has been the process of repair in case *b* accounts for the smooth white portion on the external surface of the exfoliated sac, which was shewn microscopically to be made up of young connective tissue.

When it is stated that this secondary sac in case *b* contained eighty-six ounces of urine, and reached to the level of the umbilicus, little need be said to prove how efficiently it performs the function of a receptacle for the urine, and no little surprise or admiration can be withheld from the reparative qualities of nature.

The points of importance which I have tried to bring before the Society may be summarised as follows :—

1st. That the lesion is one of death of the bladder coats, due to exudative and coagulative changes.

2nd. That the lesion may be of varying grades of severity, in some cases the epithelium alone being affected, in others the mucosa and sub-mucosa only, while frequently the entire thickness of the bladder wall is involved.

3rd. That the lesion has in all recorded cases followed prolonged retention of urine or labour.

4th. That the lesion is the result of pressure on the base and neck of the organ causing interference with the circulation, the veins being primarily compressed in cases of retention of urine, while the arteries are specially implicated in cases following labour.

From what I have just mentioned I consider there are sufficient grounds for assuming that I have brought forward a possible factor in the production of this lesion, which is applicable to all cases, and which, although it may not to all here present appear so conclusively proved as to myself, may be of assistance in clearing up the ætiology of a disease so interesting and rare, and as to which such diversity of opinion has existed.

Dr. FENTON asked Dr. Haultain whether his investigations negatived the idea of the necrosis of the lining membrane of the bladder being due to pressure of the trophic nerves, however caused. Then, as to the distension of the bladder, he asked whether the distension bore on all the coats alike, or whether one coat was more strained than the others. He suggested that possibly the mucous coat, by supporting less well the pressure than the others, might have its blood supply interfered with, and so give rise to these hæmorrhages.

Dr. EDIS explained that the author must not construe their silence as a mark of want of interest in the paper, which, on the contrary, was one of great interest and practical value.

Dr. HAULTAIN, in reply, said that none of his investigations had led him to suppose that the lesions were due to pressure on the trophic nerves. He said that the fact of the lesion being sometimes due to stoppage of the circulation without retention of urine, showed in one way that blockage of the circulation was one of the main factors in the production of the lesions; also in every detailed specimen published, there were evidences of extreme congestion of the bladder wall which pointed to arrest in the circulation being the main factor in the lesion. He showed a drawing of a case in which, although the uterus had not been moved from the pelvis and

the urine had been withdrawn before death, there were signs of fresh hæmorrhages in the sub-serous layer, the wall being necrosed and dead. He said that, so far as he could see, the elasticity of the coats was the same. In his cases the entire wall was present.

Dr. AUVARD, of Paris, who addressed the Society in French, showed a new form of instrument for crushing the foetal head in cases of dystocia. The instrument consisted of three branches—two lateral and one central. The lateral branches resembled those of the classical cephalotribe, while the central branch was adapted for perforating the head. There was a screw which articulated with one branch or with the other in order to effect the crushing. He then demonstrated the method of employing the instrument. He began by introducing the male branch of the cranioclast, and then the other branch. The screw was then turned, and the head crushed as with an ordinary cranioclast. If further reduction in size was required he then introduced the third branch, and carried the crushing still further. He pointed out that the instrument had a double advantage. It was at the same time a cephalotribe and a cranioclast, both of which instruments were indispensable. Moreover, the third branch effectually prevented any slipping of the head when the pressure was applied. He said he had used it experimentally a number of times, but only once on the living subject, and on that occasion it had answered admirably.

Dr. SOUTTER observed that the ends were rather thick, especially as it was intended to be used when space was very limited.

Dr. FENTON said that at this time it was a bold thing to introduce another of these murderous instruments when Porro's operation was daily coming into more extended use.

Dr. FANCOURT BARNES considered the instrument an excellent one, and one which quite fulfilled the claims advanced on its behalf.

Dr. AUVARD, in reply, observed that with the ordinary cephalotribe the head had a great tendency to slip, and it was

to counteract that difficulty that he had invented this instrument, and no one who had been in the habit of doing these midwifery operations for some years could fail to appreciate it. As to the thickness of the blades, he pointed out that the instrument must of necessity be possessed of considerable strength, but there was no difficulty in its introduction, because it was introduced by the side of the head, where there was usually room to spare.

Mr. O'CALLAGHAN admitted that the instrument was admirable in its way, but he hoped that French surgeons would recognise that Porro's operation was the operation of the future.

Dr. AUVARD said it was not his purpose to start a discussion on the relative merits of Porro's operation *versus* craniotomy, but simply to present an instrument which was better than the ordinary cranioclast.

A vote of thanks was then agreed to, on the motion of the PRESIDENT, to the Medical Society of London for their kindness, during the time that the Society had met in their rooms.

The Society then adjourned.

RECEIPTS AND EXPENDITURE FOR THE YEAR ENDING DECEMBER 31, 1889.

INCOME.		EXPENDITURE.	
	£ s. d.		£ s. d.
Balance at Bankers	. . . 226 10 6	Printing Journal, &c., 7 numbers	. . . 289 15 10
Annual Subscriptions	. . . 558 13 7	Engravings	. . . 17 4 6
Advertisements	. . . 96 13 9	Reporting	. . . 33 1 6
Interest Grand Trunk Stock, £270, 4 per cent.	7 18 0	Stationery	. . . 3 1 0
" Caledonian Railway, £5	. . . 0 5 11	Honoraria	. . . 63 0 0
" on Deposits, £250 and £200	. . . 2 0 8	Rent	. . . 51 19 6
Illustrations	. . . 2 13 0	Refreshments	. . . 24 7 0
Rebate on Grand Trunk Stock	. . . 1 10 0	Petty Cash, Editor, Secretary, Treasurer	. 17 8 2
From Deposit Account	. . . 250 0 0	Bank Charges	. . . 0 12 10
		Investment, Grand Trunk Railway, £270, cost	259 6 0
		On Deposit	. . . 200 0 0
		Balance	. . . 186 9 1
	<u>£1,146 5 5</u>		<u>£1,146 5 5</u>

We have examined the above accounts with the receipt books and invoices in connection therewith and find them correct.

January 3rd, 1890. HENRY T. RUTHERFOORD } Auditors.
J. INGLEBY MACKENZIE }

(Signed)

REVIEW.

*Die Krankheiten der Frauen Aerzten und etudirenden
Geschildert.* Von Dr. HEINRICH FRITSCH. Berlin, 1889.

This new edition of Dr. Fritsch's well-known work has been improved and added to, more especially from the therapeutical point of view. A text-book cannot replace the *viva-vox* of the lecturer, but it can offer a description of methods of treatment which the medical man may test in practice. Acting on this principle, the author has developed and expanded that branch of gynæcology which the Americans describe as minor-gynæcology.

He has only cursorily described the capital gynæcological operations, because he is of opinion that they are more or less in a transitory stage as regards their surgical position. He has figured in his chapter on retroflexion of the uterus two of the curious and remarkable figure-of-eight pessaries of Schultze; but he neglects to furnish the reader with a view of the more simply formed and effective pessary of Hodge. We have never been able to appreciate the long lists of authors at the end of most of the chapters in German medical works. We have frequently endeavoured to trace some connection between them and the preceding chapter, but in vain. The work of Dr. Fritsch affords no exception to this rule.

SUMMARY OF GYNÆCOLOGY, INCLUDING OBSTETRICS.

Batuaud in the *Revue Médico-Chirurgicale des Maladies des Femmes*, asks, does the ablation of the uterine annexes prove of any service in the cure of hystero-epilepsy? After citing several failures, Dr. Batuaud answers his question by stating that there is no ground for hoping for the cure of hystero-epilepsy by the ablation of the tubes and ovaries on both sides of the uterus, however completely the operation may be executed. He says, in conclusion, that he does not doubt for a single instant the good faith of those surgeons who have reported successful cases of this kind; but he claims the right to receive, with the greatest reserve, the ameliorations which they have noted after the operation.

THE MONTREAL MEDICAL JOURNAL.

Curetting the Uterus and the Methods of Treating the Cavity afterwards. By T. JOHNSON-ALLOWAY, M.D., Instructor in Gynæcology, McGill University; Assistant Surgeon to the Montreal General Hospital; Gynæcologist to the Montreal Dispensary.

Since specialists no longer regard curetting the uterine cavity with apprehension, when performed by an experienced operator, and under properly chosen circumstances, it is interesting to study the best methods of treating or dressing the wounded surface thus deprived of its endometrium. Included under this subject matter I place those cases of uterine disease which require the use of the sharp curette for the relief of abnormal hæmorrhages in all their protean forms,

also in abortion cases where much manipulation has been necessitated, and the uterine contents have been removed with the curette and uterine forceps.

Before entering directly upon the subject it will be necessary to say a few words regarding the cases which generally require curetting, and the best kind of instrument to use.

Menorrhagia and metrorrhagia indicate local disease or change in the lining membrane of the uterine cavity. In certain zymotic diseases, when we have blood change, increased menstruation is not at all uncommon. This increase in the flow is due to increased stimulation of the sexual organs under the influence of these blood changes, and I have no doubt is often determined and made more pronounced by some pre-existing local disease of the endometrium. Also such conditions as insufficiency of the cardiac valves or emphysema will cause an increase of flow in another and different way. Metrostaxis under such circumstances does not come within the range of our subject and only requires a passing notice. If, however, a menorrhagia should continue after the febrile attack has passed away, and in fact seem to date from it, the condition should be recognised as one for local treatment. This is self-evident, because we know that vitiated conditions of the blood and disturbances in the circulation seldom or never cause prolonged menorrhagia except when associated with an already diseased local condition. The history of a patient will often point to a statement made to the effect that her menorrhagia began with some illness, and has continued more or less ever since. In such a case we have undoubtedly a local disease which only wanted the opportunity to set going an abnormal function in the organ involved.

Coming now to the *local conditions* which cause menorrhagia and metrorrhagia, we may classify them as follows:—Those involving disease of the adnexa and parametral tissues, and those involving actual disease of the uterine tissues proper. Metrostaxis due to the former condition generally gives relief to pain, and will not, as a rule, return after the in-

flammatory lesion has disappeared. It is therefore better not to check it; the rest and associated treatment will be all that is necessary. It is better to wait until the condition begins to manifest a tendency to become chronic before resorting to the curette.

Myomatous tumours of the uterus seldom give rise to hæmorrhage unless they are so situated that the endometrium undergoes an extreme change in its vascularity. Tumours growing towards the cavity and not involving the outer uterine layers produce great increased vascularity and hyperplasia of the endometrium, while tumours which tend to grow outwards and become sub-peritoneal do not cause any vascular or nutritive changes in the endometrium whatever, and are therefore not accompanied with hæmorrhages. In all cases of uterine myoma, accompanied with excessive hæmorrhage, it is advisable to curette the cavity as a preliminary step, instead of wasting time and reputation with palliative methods. A short time ago I removed a long finger-like mucous polyp from the uterine cavity of a patient the subject of a medium-sized interstitial fibroid. The hæmorrhage ceased almost immediately, and gave no further trouble. In another similar case I removed a so-called placental polypus some three inches long. The patient in this instance expressed a desire to undergo the recent fashionable treatment by electricity to cure the hæmorrhage supposed to be due to the mural fibroid. It, however, occurred to me to explore the uterine cavity with the curette first, and obtain a knowledge of its contents, if any. The result was sufficiently satisfactory to require no further treatment.

In cases of hæmorrhage from fibroids I would advise in every case where it is possible to explore the cavity and thoroughly curette the hyperplastic endometrium. I am of opinion that this should first be done before resorting to removal of the appendages or hysterectomy. In every case of chronic hyperplastic endometritis following abortion, cervical lacerations with sub-involution, gonorrhœal inflammations, and displacement with exhaustive menorrhagia and

leucorrhœa, the cavity should be curetted of every vestige of diseased endometrium and the wounded surface treated as will be pointed out further on. It is understood that uterine discharge due to malignant disease will not be considered. I may, however, say in passing, that cancer is a common cause of metrorrhagia in women over thirty-five years of age, and I regret to acknowledge that there are still men high in the respect of their colleagues—especially in England—who regard menorrhagia at the time of the menopause as evidence of its normal approach. To my mind there is no more iniquitous teaching, or one fraught with more disaster to our reputation with the public. In my experience of such cases I have never failed to find either malignant disease or fungus degeneration of the endometrium, and who can say but that the menorrhagia was, in fact, a warning note to remove the benign embryo that the destroying parent might not get vigorous life. Clinical examples have occurred to most of us wherein the microscope could not discover evidence of malignancy, and yet these patients died of undoubted cancer. All physicians should therefore insist upon examination of their patient under such circumstances, and advise them accordingly.

A few words now about the kind of curette to be used. In cases of chronic endometritis there are three forms of curette from which we can take our choice—Martin's, Sims', and Hanks. Of these Martin's is the one I give the preference to, and use most frequently. Sims' instrument is a good one, and Hanks' curette is also serviceable, though somewhat difficult to introduce should the cervix be not dilated sufficiently and the cavity not straight; also, the shank of the instrument is too flexible and bends in the hand, which is a bad fault.

In regard to the operation, I do not think it should ever be done without an anæsthetic. I have disregarded this provision many times myself, but must admit that there have been few occasions upon which I did not feel a regret that I had so acted. The operation is never so perfectly done; it is

hurriedly done, and to say that the patient does not suffer pain is untrue. I have known them to suffer severely, and the operation to be followed by a certain amount of shock. It is also unsafe to curette a uterus without first freely using the powerful steel dilators to at least one inch. This is done to ensure good drainage, and should be done whether the cervical canal seems sufficiently patent or not. The curetting should be continued until no more endometrium can be obtained, two or three minutes being ample in point of time. The cavity should now be irrigated with plain warm water, after which we must decide what form of dressing we are going to apply. The simplest form is to let the part alone, and return the patient to bed ; injection of iodized phenol, by means of a syringe made for the purpose, and containing thirty to sixty m. of the fluid. Churchill's tincture of iodine is sometimes used, but it is much more painful and less effective than the iodized phenol. Swabbing the cavity with pure carbolic acid is a very good method, and has in my hands given good results. Packing the cavity with pledgets of cotton wool impregnated with iodoform is the method known as Vulliets'. It is, however, difficult to do, is clumsy, and if the cavity is packed too firmly the procedure will give rise to severe uterine colic.

Of all the methods, however, of dressing the uterine cavity after curetting, which has proved most satisfactory, is that of filling it carefully with iodoform gauze, and leaving the end extruding from the external os. The pressure here exerted upon the uterine walls can be so beautifully and perfectly graded according to the judgment of the operator that all hæmorrhage is at once arrested. Tags of unfinished shavings are compressed firmly against the denuded surface, and unite there. Under other circumstances these unfinished scrapings often necrose, and the base of the shaving forms a little eddy for retention of discharges to decompose and set up trouble. The principal locality in which these spots of danger occur is just above the internal os. When iodized phenol or other cautery is applied these jagged points are converted into little

ulcerating pits from which septic absorption takes place, culminating in a sharp attack of pelvic inflammation. Every gynæcologist has experienced such unpleasant results after curetting when there previously existed no legitimate foundation for such a sequence, and may be accounted for in the manner I have described. This danger will always exist with the injection of fluid or the application of caustics to the interior of the uterus, and should not, therefore, be made a routine practice.

Now that we are cognisant of these dangers, we can see the great safety and therapeutic advantage of filling tightly the uterine cavity with a soft elastic and aseptic material prepared with iodoform suspended in paraffin. This material, prepared by Dyer of Montreal, is in advance of every other for this purpose. It can be left in for four or five days, if necessary, without the least fear of having it undergo change. There is absolutely no drain so good, and by its side pressure on the uterine walls all remnants of undetached membrane re-unite, resulting in a perfectly smooth cavity surface. The cases which are generally met with in which this dressing is applicable are:—Curetting for hæmorrhagic endometritis; with Schröder's trachelorrhaphy; in bleeding myomata; for removal of retained products after abortion, the method is especially satisfactory here. It arrests all bleeding at once, secures good drainage, and induces contraction of the uterus, thus favouring rapid involution. In a case of this nature I saw recently in consultation with Dr. Gurd, I removed a large adherent placental mass. Pregnancy had ceased at about the fifth month, but the placenta continued to grow for some time afterwards. It was so firmly adherent that it became necessary to remove it in very small fragments with curette and forceps. I packed this uterus to a fair degree of pressure, and on the second day I found the gauze had all been expelled and the uterus reduced in size with firm contraction. The gauze packing is often expelled, especially in abortion cases, but it can easily be removed on the third or fourth day by simply introducing the dressing forceps to the cervix along

two fingers of left hand, as a guide, and gently withdrawing the gauze. No irrigations are required after its withdrawal, as the vagina is still aseptic, and will remain so if not interfered with.

A word, in conclusion, in regard to the use of the sharp curette. This instrument has been held in great awe for many years by a large section of practising physicians; and these gentlemen have always urged the use of Thomas' dull wire curette when an operation of this nature was about to be performed. This general professional impression having prevailed, it seems apparent that there must have been some good cause for this strange aversion to the instrument. Those who have had experience with it, and have necessarily become skilled in its use, will see that the cause of the above impression rests with two facts—first, carelessness or neglect in making the field of operation absolutely aseptic; second, unskilful use of the instrument due to want of constant experience. When we consider the important meaning of these facts, it is surprising the little harm the instrument has done.

NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY'S TRANSACTIONS.

Remarks on Gynæcological Work. By R. CREWDSON BENTON, M.B.; Fellow of the Obstetrical and British Gynæcological Societies.

It may seem strange (in this the nineteenth century) to bring such a paper as this before a Medical Society; but I have lately met so many men who appear to ignore the importance of what may be called the minor diseases of women to such an extent that I have been induced to bring the matter forward, with a view of elucidating the opinion of members on the subject.

We have amongst us men who are far-famed for the treat-

ment of the major cases, but for one case of ovarian tumour we meet with, we may, if we look for them, find hundreds of cases of minor importance as concerns life, but which, nevertheless, entail a life of misery to the unfortunate patient, and with which we can and ought to deal.

I can safely say that, apart from obstetric cases, when I was in practice every third woman who applied to me was found, on questioning her, to suffer from some uterine trouble. Let us look at the subject from three standpoints :—

1st. Our duty to our patients.

2nd. Our duty to ourselves.

3rd. Our duty to the public at large; and their duty to us.

In the first place, I think all will agree that our duty to our patients consists in bringing to bear such knowledge as experience may dictate, to enable us rightly to appreciate the cause of their complaint and to treat them successfully. Is it not, therefore, the duty of every medical man, before giving an opinion or attempting to treat a case of female disorder, to satisfy himself before he does so as to the healthy discharge of the uterine functions to the best of his abilities? To use an old simile, if a patient came complaining of pain round the fauces and hacking up of mucous, few men would prescribe a gargle or medicine without examining her throat; and I consider it as unfair to the patient and as immoral an action to treat a case of vaginal discharge and discomfort without due investigation as it would be to send the first-mentioned patient away without examining her throat. When disease is in question, we should put aside feelings of mock modesty, and enquire into and treat disease of the genito-urinary tract with as much openness and candour as we would an ankle joint.

Secondly: Our duty to ourselves is to fathom the condition of our patients, that we may be enabled to give an opinion and treat rightly the cases which come before us, so as to reflect credit to ourselves and the noble profession to which we belong.

To conduct an examination with advantage, a man must by his past experience be able, not only to conduct the investigations, but be able to appreciate rightly the value of any slight deviations from the normal condition.

Lastly: We have to deal with the duty we owe to the public, and the duty of the public to us.

I suppose the public have a right to expect that we shall, in the words of Lord Chief Justice Tindall, "exercise a reasonably fair and competent degree of skill" in our professional work.

We have in our neighbourhood various noble institutions for giving medical assistance to the needy, in some of which doubtless much work is done in this department, but, with the exception of the women's disease department of the Newcastle Lying-In Hospital, there is no special attention paid to this class of disease. Students as a body have not afforded them as yet the opportunity for such sufficient practical experience as may render an examination of any value to them. I myself have been a student at a hospital where a man has the opportunity of examining fifty women in a day; and I put it to the members strongly, as I am sure I have found myself to be the truth: is not this the only way in which the necessary *tactus eruditus* can be acquired? Such work as this can only be done by *centralisation*. There is a universal cry for education in these matters. A man attends twenty cases of midwifery never perhaps examines a vagina unless in a state of advanced disease, how is he to attain that degree of delicacy of touch and dexterity of manipulation which are necessary for him to detect slight deviations from the normal? A man gets qualified and goes out into the world with his head full of obscure nervous diseases, cardiac murmurs, and interesting pathological curiosities—things he may meet with a few times in his life—but for one case of amyotrophic sclerosis or locomotor ataxia he will see in his practice, he will see hundreds of suffering women whom it is within his power to alleviate or cure; and I appeal to this great educational centre—are the students here as well favoured even as students of other colleges of

medicine? Have they the facilities afforded them of gaining such practical experience in these matters as may ensure their success in after life?

How many cases of what may be termed the minor diseases of women come for treatment in our various institutes?

The public institutes of Newcastle-upon-Tyne draw patients from Northumberland, Durham, and Cumberland, containing a population, according to the census of 1881, of 1,551,991. What a field for education, investigation and research!

Some years ago a gynæcological department was authorised by the committee of the Newcastle Infirmary, and in 1885 I see by their report that 210 women applied for relief at that department, and that 167 cases were taken into that institute for treatment. It was closed, for reasons doubtless considered by those in authority as adequate, and what are the results:—

Firstly: The opening of the gynæcological department at the Infirmary withdrew subscribers from the special department in connection with the Lying-In Hospital; and I regret to say that those old subscribers, since the closing of the department, have never been brought back into the fold.

Secondly: A lamentable falling off of these cases in both in- and out-patient departments of the Infirmary, at which institute only eighteen appear to have been seen amongst the out-patients, and 132, as against 167 in 1885, amongst the in-patients; and now the pecuniary condition of the special department of the Lying-In Hospital is such, I am informed, that unless something be done, and that quickly, it will have to be closed.

Out of the total number of gynæcological cases seen in this district, the 150 seen at the Infirmary are alone available for educational purposes.

Comparisons are odious. I will only take one instance, that of the nearest educational centre to us, Leeds, and state that at the special department at the Infirmary there, there are about 900 fresh cases annually treated in the out-patient

department, with a total attendance of 2,600, and 176 in-patients. At this one institute, therefore, they had 1,076 cases available for educational purposes, against our 150 last year.

Now, let us look at it from a public point of view. I have said already that what may be termed our collecting area comprises a population of a million and a half, according to census of 1881. On the same authority, the population of the West Riding of Yorkshire is 2,175,314, of which one million is represented by the other large towns exclusive of Leeds. The population of Leeds was at that time 309,119, and I have it on the best authority that 750,000 represents fairly the population of Leeds and surrounding neighbourhood at the present time; call it a million, that is giving a fair latitude. This leaves 175,000 for the surrounding population not included in the Parliamentary boroughs of such towns as Sheffield, with its Parliamentary population of 284,508; of Bradford, with its population of 183,032; of Huddersfield, with its population of 87,157, and various other towns, all of which are supplied with medical charities, and in all of which such cases are treated (if I had not confined myself to nearer home I might have had something more to say of Sheffield with its Jessop Hospital for Women, with 376 in-patients and 2,248 out-patients). Considering these facts, I think we are allowing full latitude when we place the collecting area for the Leeds district at one million; ours is a million and a half.

In their three main medical institutes they treated collectively 2,110 new cases last year, against our 690. That is just three times as many; or, to put it in other words, we ought to see 3,165 instead of 690, or nearly five times as many as we do.

In the face of these statistics I may fairly ask: How is it that one hears so little of disease of the reproductive organs in certain districts, and that they appear so plentiful in others? Are such cases as granular cervix, flexions, disease of the tubes, endometritis, &c., creatures of the imaginative powers of the physician, or are they stern realities? Are there any climatic influences in the neighbourhood which cause our

women to be exempt from such complaints, or may the apparent want of attention to these matters account in any degree for the high death-rate of Newcastle? I think we must grant that such cases exist in like amount in every part of the country. Is there greater skill elsewhere, which, by its magnetic influence, irresistibly draws women to their institutes? Are not Abana and Pharpar, rivers of Damascus, better than all the waters of Israel? Am I not surrounded by surgeons and physicians of eminence and renown?

We must seek further for an explanation. It is apathy! Apathy on the part of the medical profession, engendered by success in bygone times; and apathy on the part of the general public from want of knowledge, which knowledge it is our duty to impart; and I call upon this great College of Medicine, and upon the members of this Society, whom I have the honour to address, to awake from their lethargy, to rise to the exigencies of the age, and to bestir themselves; and I look forward to a time, and that not far distant, when we shall have in our midst a gynæcological department or institute second to none in the world.

The points I wish to emphasise are these:—First, that acknowledging uterine ailments to exist, it is our duty never to shrink from making a vaginal examination when we consider it advisable; and that, secondly, it is advisable in all cases of obscure pelvic pain, discharges *per vaginam*, derangements of the menstrual functions, dysmenorrhœa, and other cases presenting conditions which cannot be definitely diagnosed by external manipulation, whether in married or single women, provided that the conditions cannot be traced to other causes.

Thirdly: That in consequence of the lack of centralisation, many suffering women live a life of misery instead of receiving medical aid, and a great amount of material for education, research and improvement is lost.

Dr. GIBSON remarked that at present the field for the clinical study of the diseases special to women was a very limited one; but that probably at an early period, more ample

hospital provision would be made than has hitherto held in Newcastle for the reception and treatment of such diseases.

Dr. J. A. JACKSON : Dr. Benington has alluded to the fact that so few cases of diseases of women are available for examination by the Newcastle student, and instanced the Leeds School, where the number of cases which pass through the hospitals is so much greater. I shall be pleased to hear from Dr. Benington that the Leeds students have the advantage of examining these cases, for at one school of medicine I can mention, where there is no lack of material, as many as forty cases passing through the dispensary in one day, what Dr. Benington has called "mock modesty" exists to such an extent among the teaching staff, that the students are not allowed, except by special leave, and then only for a stated time, to attend. In all the other departments of this dispensary, I may state, no such restrictions are imposed. It does not, therefore, follow that the number of cases available bear any proportion to the opportunities of the students.

Dr. ADAMSON : I would suggest that Dr. Benington should have addressed this paper to the authorities of the Medical School rather than to this Society. The question is one of difficulty, and I submit the first thing is for the student to recognise the normal and healthy condition of the vagina and generative organs, and then a knowledge of departure from that condition and the extent of it will soon follow. But that is the difficulty. How are we to get women in a state of health, without some real or fancied ailment, to submit to vaginal examinations by a number of students? The importance of the subject no one can doubt, and each member of this Society would be glad if means could be found by which students would have opportunities of acquiring the necessary knowledge ; but I very much fear the attempt to carry out the suggestions of Dr. Benington would probably be followed by failure.

The PRESIDENT, Drs. GALLOWAY and MANTLE, also made remarks on the paper, and Dr. Benington replied.

Two Interesting Questions in Gynæcic Surgery, Illustrated by Cases. By T. JOHNSON-ALLOWAY, M.D., Instructor in Gynæcology, McGill University.

First—The Relation of Schræder's Hystero-trachelorrhaphy to future Parturition.

Second—The failure of Electrolysis, faithfully carried out for one and a-half years, to influence a hard, slowly-growing Myofibroma Uteri. Removal of Appendages by Laparotomy, immediately followed by premature menopause and return to health.

Two years ago I read a short paper at the Ottawa meeting of the Canadian Medical Association on "The Comparative Merits of Schræder's and Emmet's Hystero-trachelorrhaphy." In this paper I embodied the results and experience obtained from fifteen hospital and twenty-two private cases. During the discussion which followed the reading of this paper, the question was asked, "What effect would the operation have upon future pregnancy and parturition?" This question I could not satisfactorily answer from personal experience up to that time. I have since been informed by the attending physician of a few of the cases I had operated on, that they had confined their patients without any unusual complication. But I was anxious to have personal experience of this nature with a few of these cases. The opportunity presented itself to me some months ago. I was thus enabled to make some valuable observations during the progress of labour.

The first case of which I will speak had borne three children within the space of six years. She had been in very poor health for some time past, and was a subject of all the reflex neuroses which accompany a badly lacerated cervix complicated with chronic metritis and profuse purulent uterine leucorrhœa. A few months after the operation she regained her health and became again pregnant. She was carefully watched during the pregnancy, as she had suffered two miscarriages before the operation. It was interesting to observe the effects of the operation in this direction, whether it would

have a tendency to favour the occurrence of the accident or otherwise. In this case no pregnancy ever progressed to the end more favourably. The observations made during the progress of labour were indeed interesting. Labour had just begun when I made the first examination. The pains were extremely light, and it seemed to me as if several hours might elapse before attendance would be required. On introducing my finger into the vagina I was surprised to find the bag of membranes distended to complete fulness occupying the vagina and nothing else to be felt. There was no evidence of the usual resisting ring through which the membranes protrude; nothing, in fact, could be felt but this boundless bag of water containing, high up, the head. I ruptured the membranes, and before I could remove my coat the foetus was expelled. The placenta presently followed, but the uterus remained a little soft. External manipulation was kept up for some time, still there seemed to be a want of reflex irritability about the organ. I introduced my hand into the cavity, but found no clots to speak of. The uterus soon afterwards recovered its tonic contractility and remained hard and small. During the time my right hand was in the cavity of the uterus I could distinctly feel what appeared to be the narrow, thin edge of Bandl's ring. The convalescence of this patient was most satisfactory. The cervical opening had the same appearance as directly before impregnation, and involution of the pelvic organs have been very perfect.

The second case of this nature occurred in a lady who had borne eight children, who had not been pregnant during the past eight years. She suffered from incomplete uterine prolapse and general failure of health. One year after I had repaired the cervical and perineal lacerations she became pregnant. Pregnancy followed a very even course; but when labour set in the pains were so violent that chloroform had to be given. On making the vaginal examination the same condition presented as in the first case—*i.e.*, the bag of membranes completely filled the vagina, no cervix being within reach. After the membranes were ruptured the labour soon

terminated. There appeared in this case also a slight degree of inertia of the uterus. When, however, the uterus once contracted firmly, it remained so. This patient made a good convalescence, and the uterus involuted well.

In regard to the changed condition of the uterus induced by amputation of the cervix which was especially high in these two cases, and to the course future pregnancies would follow, it has been a matter of some question. Some have suggested that the operation rendered pregnancy less likely to occur afterwards. On this point my experience has pointed to the reverse, and it is that which should be expected. An old hypertrophied, cystic and bulbous stump discharging large quantities of muco-pus has been converted into a hollow-shaped cone with a small opening in the centre, absolutely free from abnormal secretion. There is to me no condition of the parts in question so favourable to impregnation, and in the last case recorded it proved an actual cure for the relative sterility.

Further experience regarding this point, however, will be required in order to enable me to speak more definitely. The question of the liability to early interruption of pregnancies can be answered, I think, negatively. I have not seen a case where early abortion could be attributed to the operation, and anatomically it would not be indicated.

In regard to the influence of the operation upon full-term labour, it certainly hastens it, renders it a much less painful and tedious process, and does away with all possibility to traumatism of the cervix, and therefore lessens the liability to infective disease. This latter is a most practical point, and in importance cannot be over-estimated. The relation which the cervix uteri bears to the whole female sexual system in the matter of septic infection is well recognised and needs no further comment. I do not mean by this that there has been a developmental error in the process of progressive evolution, but I certainly do mean that I have seen more evidence pointing to the cervix as an object of danger than I have to it being one of usefulness. And should experience prove that

this operation will not involve any very serious drawback, I am afraid my convictions in this respect will rather gain than lose strength.

II.—Case of Uterine Myoma treated by Electricity and eventually by Laparatomy.

This case was referred to me by the late Dr. R. P. Howard in April, 1888. History as follows: Married eight years; never been pregnant. For the past three years she has been losing blood very freely at each menstrual period; duration of flow from ten to twelve days, accompanied with a great deal of pain. Leucorrhœa very profuse. Extreme anæmia and general failure of health.

Examination.—Interstitial myoma apparently occupying the right anterior segment of uterus. Uterus mobile and not tender to manipulation. Sound enters 12 cm. and in a straight direction. Auscultation gives a distinct bruit over tumour. The tumour reached to within half-an-inch below the umbilicus, and could be freely moved in every direction.

After explaining to the patient the different methods of treatment adopted for the relief of her condition, she selected electricity. From May 10th to August 18th, 1888, she received thirty-one applications, chiefly of the positive pole, averaging from 70 to 100 ma. for five to ten minutes each application. During some of these sittings she suffered a good deal of pain, and I had often difficulty in encouraging her to continue the treatment. Towards the end of this course she became much improved in her general health. She seemed to gain colour, and the blood condition was certainly much improved. She was stronger, evidenced by her being able to walk longer distances. She returned to her home, and spent August and September at an inland summer resort. In October she began to fall a little back in health, and the hæmorrhages became again excessive, also some pelvic pain. She returned to me for treatment on October 11th, and

remained until January 9th, 1889, receiving thirty-four applications of positive pole of strength 70 to 100 ma., as in first series. I was under the impression that she suffered more pain during this series, and I had greater difficulty in encouraging her. The monthly hæmorrhages lessened and she again became stronger. During the six months of almost constant treatment the tumour never diminished nor changed its character permanently in any way. At times I would think it was smaller, but it would regain its size without any accountable reason.

She again returned home for a short time. In May, 1889, she visited me and received ten applications as before. In October she became discouraged, having received no lasting benefit from the electrical treatment, and asked me to remove the appendages. This was done on the 4th of October. I found some difficulty in reaching the appendages on account of the size of the tumour, but as there were no adhesions this did not matter. This patient returned home on the 9th November. She has, since the operation, passed two periods practically without discharge. Her pains have all disappeared and she is as much improved in general health as could be expected in the time.

During the electrical treatment of this case I had been most careful to take a record in detail of the effect of each application, and I am now convinced that my patient suffered more at each seance of over 70 ma. than she did during the whole of the period of convalescence following the operation. It therefore cannot be wondered at, although surgeons are straining every nerve at present to give the votaries of electricity in gynæcology as much rope as possible, that they break out sometimes in condemnation of the method, with what seems a feeling of just indignation.

ALBANY MEDICAL ANNALS.

A Report of Ninety Cases of Rapid Dilatation of the Uterine Canal for the Cure of Dysmenorrhœa and Sterility.

Dr. FRANKLIN TOWNSEND, Professor of Physiology, Albany Medical Collage, says : I take particular pleasure in presenting a report of the results following the operation of rapid dilatation of the uterine canal under ether, as suggested by Goodell in conditions—

1. Where severe and intractable dysmenorrhœa was the most prominent symptom in unmarried women ; and

2. Where sterility existed, either accompanied by dysmenorrhœa or not, in those married.

From a careful analysis of ninety cases operated upon by me for the relief of these conditions, beside consulting the reports of other operators, I am led to believe sincerely in the beneficent results following this method of treatment.

Formerly it was my custom to dilate the cervical canal where stenosis existed, by a process of gradual widening by Peaselee's dilators, or uterine sounds of steel, or by Sims' method, &c., slowly, possibly on an average of every third day, increasing the size of the sound at each sitting. Suffice it to say that success *never* appeared to attend my efforts in bringing about immediate relief (after a very extended trial), though in the hands of some, gratifying results have been occasionally secured, I believe.

From the time that Goodell reported, in an article read before the Obstetrical Society of Philadelphia in 1884, on "Rapid Dilatation of the Uterine Canal," and which appeared in the *Trans. Obstetrical Society of Philadelphia*, 1884, I ceased using the old method of *gradual* dilatation, and substituted the *rapid* method under the influence of complete anæsthesia, with results most gratifying and noteworthy, as will be seen from the following tables :

Dilatation in virgins for dysmenorrhœa, other means failing ...	57
Complete cure of dysmenorrhœa	53
No better	3
Made worse	1

Dilatation in married women for dysmenorrhœa and sterility, other means failing...	...	...	...	...	33
Complete cure of dysmenorrhœa ...	...	...	...	...	33
Complete cure of sterility ...	...	...	...	...	27
Remaining sterile two years or more after operation...	...	...	...	...	6

Indications For and Against the Operation.

For Operation.—For an operation of this nature to be successful, it seems to be essential that the pelvic peritoneum and cellular tissues be in a normal condition, the uterine adnexa also in a similar state, and, I imagine, when these are *not* so, many of the failures noted are thus to be ascribed. Endometritis and metritis, even with retro- or antelexion, are *not* in *themselves* necessary barriers to the operation. The straightening of the uterus, with permanent free drainage from the cervical canal, is sufficient in *itself* as means toward a cure of the flexions, metritis and endometritis which may exist. Indeed, it must be freely confessed, I think, that when cervical stenosis exists, endometritis, with or without metritis, is pretty sure to be found. There may or may not be flexions.

Against Operation.—It would seem utterly futile and *even dangerous* sometimes to operate in cases where pelvic peritonitis or cellulitis existed; and should salpingitis, no matter what the character, be present, the result of such procedure is almost a foregone conclusion—failure.

The conditions above mentioned should be first properly treated, especially perimetritic and cellullitic inflammatory troubles, and done away with entirely if possible before dilatation is practised. Indeed, success rarely, *if ever*, attends in any case where the conditions above mentioned prevail.

From the above, therefore, it would seem absolutely essential that, for success to follow this operation, the cases must be carefully selected.

Again, it has been my experience to find failure following what I would *now* recognise as an incomplete operation—I mean an operation where *all* the steps were not *thoroughly* carried out.

Assuredly, "rapid dilatation of the uterine canal" does not mean rapidly dilating the canal under ether, possibly from one-quarter to one-half an inch, or even an inch, and then leaving the patient, trusting to nature to do the rest. Such a procedure is a thing of the past, I hope, where the simple "stretching" of the canal a trifle, without even the use of an anæsthetic, was deemed sufficient to work out marvellous results.

From a careful study of my cases, complete records of each having been kept, I am convinced of the absolute inutility of this operation as just expressed. Possibly temporary amelioration of symptoms may follow simple dilatation of the narrow cervical canal, but in time the patient is equally as miserable as before operation. The patency of the canal caused by the dilatation will *not* remain permanent, even where rupture of the muscular fibres about the internal os takes place, unless it be kept so by the use of some such instrument as the stem pessary, which not only aids in *this* manner, but also acts very efficiently in straightening the whole uterine organ.

I am aware that there are many who hold that the use of such an instrument is a *most dangerous* procedure in *any* case, but I think that such views are greatly exaggerated, as in *no* instance have I seen any untoward results following the introduction and continued use of this form of pessary. This may possibly be accounted for in the careful manner exercised in its use, for I can readily understand that careless introduction of the same, with inadequate injunctions regarding its possible dangers, laid strictly down to the patient, might, and in many instances no doubt *has*, given rise to most unpleasant, nay, even *dangerous* results.

The various steps in the preparation of the patient for the operation, and those concerned in the operation, which have so uniformly yielded such excellent results, are simply these:—

First. The patient is to be operated upon a *week*, if possible, after her last menstrual period, thus giving sufficient

time before the next flow for the healing of the uterine tissues, which, near the internal os, became bruised and lacerated; also, the stem has the opportunity to remain a sufficiently long time *in situ*, thus materially interfering with any serious narrowing of the cervical canal.

Second. The rectum being previously unloaded by enema, the bladder emptied, and the vagina thoroughly irrigated with a warm, clean solution of bichloride of mercury, one to five thousand, the patient is considered prepared for the operation.

Third. All instruments used are to be thoroughly cleaned, and laid in a pan containing warm bichloride solution, one to five thousand. The essential surgical armamentarium is limited, consisting of a Sims' speculum, a double or single tenaculum forceps; Ellinger's uterine dilators, corrugated ends, large and small size, as modified by Goodell; stem pessaries of plain vulcanite, or Thomas' galvanic stem pessaries, none to be longer than one and a-half inches; sponge-holders and small sponges; tampons of prepared cotton or wool, soaked in a thirty per cent. solution of boro-glyceride.

Fourth. After the patient is thoroughly anæsthetised, placed in Sims' position, and the speculum introduced and held by an assistant, the operator seizes the anterior cervical lip with the tenaculum forceps, and gently draws down the uterus to near the vulvar orifice. This procedure tends to straighten the uterine canal for the introduction of the small dilator, which, when introduced beyond the internal os, is slowly opened, until it is thought that sufficient dilatation has been reached for the introduction of the large Ellinger, whose blades should then be separated to the extent of an inch at least, as marked on the scale placed near the handle—this being accomplished more or less gradually, and not by rude, quick measures; the stem is introduced, the tenaculum and speculum are then removed, and the vagina tamponed, as well as a rectal suppository introduced consisting of opium one and one-half grains, belladonna extract one-half grain, and hyoscyamus extract one grain.

Fifth. Should pain supervene, as is the case very frequently, especially over the hypogastrium, a flaxseed poultice, with tincture of opium, is to be applied. The urine is to be drawn, if necessary, for a day or two. Usually in a week's time the patient is enabled to be out of bed, and, provided no pain is occasioned by the presence of the stem pessary, it is to be left until just before the next menstrual flow, when it is then to be removed, and after its cessation it is to be reinserted.

It was noticed, when referring to the results of rapid dilatation in virgins, that out of fifty-seven cases, four were failures—that is, they were no better after the operation than before it—and one was made much worse.

This latter case was that of a girl, aged nineteen, suffering from an acutely anteфлекed uterus, with a narrow cervical canal, conical cervix ("pin-hole" os externum). It was in the winter when the days were short; the operation was begun late, darkness obscuring absolutely all specular observations. She took ether badly, and was only partially under its influence when the dilator was introduced into the cervical canal. There was no opportunity afforded for the use of the speculum because of the darkness, and the whole operation was performed by the sense of touch alone—the dilatation of necessity, therefore, being but moderate and ineffectual, the patient being "out from the anæsthetic," and wildly tossing about the bed, almost before the blades of the instrument were withdrawn. Naturally, in this instance, no stem pessary could be used. Altogether I regarded the whole procedure as not only having been poorly and inadequately performed, but censured myself severely for allowing my better judgment to be led astray in attempting the operation under the unpromising conditions as already enumerated. In this case, pelvic peritonitis was promptly developed, and it took quite three months before the young woman was on her feet again. No one was more to blame than the operator, I felt, and I made up my mind never to allow myself a *second* time to be caught in a similar predicament.

In the other cases which proved failures, the operation was

repeated in two of them, after an interval of three months, and one was operated *three* different times with no good results. All of these, I believe, remain sufferers from dysmenorrhœa at the present time. In all these latter cases the operation was performed with the same care and precautions already mentioned as being so essential to success.

As to the value of this operation for overcoming conditions of sterility, I can only say that the *results were far beyond my expectations*. Referring to the second table it will be noticed that *all* were suffering from dysmenorrhœa, and that the operation was productive of relief in *all* of the thirty-three cases, and also that twenty-seven out of this number became fertile sooner or later after the operation—assuredly a good percentage.

In this connection, a pertinent question naturally arises, and is one difficult to answer. Did the operation put the patient in a more favourable condition for conception? Or, might it not have been, that these patients would have conceived without such operative interference?

In answer, I can only say that in all but three of these cases operated upon, pregnancy became evident after a few months—that is, within a year. Of the three going beyond a year's time, one conceived at the fifteenth, one at the seventeenth, and one at the twentieth month after the operation.

As to the duration of the sterility in these cases, I append a table, which goes to show that, in all of the twenty-seven cases, more than two years had elapsed since they were married, the minimum length of time being twenty-eight months, the maximum nine years.

As to whether these cases if left to themselves would have conceived or not, I am not prepared to say, but I feel assured from the evidence, that the operation placed them in a condition much more favourable for such a result to follow than had they been left severely alone.

Case.	Number of years sterile.	Conception followed operation.	Age.	Dysmenorrhœa.
1	2 years, 4 months.	2 months.	27	Yes.
2	3 "	3 "	24	"
3	3 " 2 "	3 "	24	"
4	3 " 3 "	6 "	27	"
5	3 " 3 "	3 "	26	"
6	3 "	2 "	25	"
7	3 " 8 "	8 "	29	"
8	4 " 1 "	3 "	31	"
9	4 "	4 "	33	"
10	4 " 6 "	3 "	29	"
11	4 " 8 "	4 "	25	"
12	4 " 9 "	5 "	27	"
13	5 "	6 "	27	"
14	5 " 6 "	7 "	30	"
15	5 " 8 "	8 "	32	"
16	5 " 9 "	4 "	31	"
17	6 " 7 "	5 "	29	"
18	6 "	15 "	28	"
19	6 " 1 "	10 "	29	"
20	6 " 3 "	9 "	27	"
21	6 "	5 "	26	"
22	7 "	17 "	38	"
23	7 " 1 "	11 "	30	"
24	7 " 3 "	5 "	32	"
25	7 " 10 "	20 "	29	"
26	8 "	4 "	31	"
27	9 "	7 "	35	"

*Four Cases of Extra-Uterine Pregnancy.**

By G. M. TUTTLE, M.D., New York.

In acceding to the request of our secretary to prepare, upon short notice, a paper for your consideration this evening, I am denied the satisfaction of presenting to you a novel topic or the results of original investigation; but in asking you to follow with me the histories of four cases of ectopic gestation which called for operative interference, I am mindful of the keen interest with which this subject has always been discussed by our body—an interest enhanced by the lack of entire agreement of our views upon the subject, or of unani-

* Read before the New York Obstetrical Society, May 7th, 1889.

mity in the deductions we have each drawn from personal experience.

CASE I.—Admitted November 25th, 1887, E. K., age 20. Menstruation began at 14, regular in character; flow free and lasted eight days. Pain in iliac regions for two days prior to and during first two days of flow. Married at 15; a miscarriage at third month, eight months after marriage; no other pregnancy. Has had a continuous thick white and yellow discharge ever since marriage; no other venereal symptoms. Menstruated as usual for eight days in September. No menstrual flow in October. About November 1st began to have some pains across lower part of abdomen—pains of a sharp, shooting character, lasting an hour or two at a time and causing patient to “double up.” On November 15th a free bloody discharge from uterus began and has continued ever since.

Condition on admission: Fairly nourished; facies, anxious; colour, pale; bowels obstinately constipated, and patient says there is a sensation of something “in the way” during defæcation. Urine: Trace of albumen; no casts. Micturition difficult and painful. Uterus strongly anteflexed; fundus enlarged and softened; at left of uterus is a mass. Cervix patulus and soft. Temperature 99°.

Patient remained confined to bed until February 16th (three months), when she was allowed to go out for a week on a pass. During this interval in the hospital she suffered constantly from severe shooting abdominal pains; obstinate constipation, which required the constant and persistent use of enemata; painful and difficult micturition, and a dark, blackish brown, bloody uterine discharge. On January 4th it was thought that the mass at the left of the uterus was increasing in size, and a faradic current was applied as usual through the mass daily for ten days, without apparent effect in reducing the size of the tumour. Temperature ranged from 99° to 101°.

February 23rd.—Patient returned to hospital and now first came under my care. She was thin, pale, and with facial expression of much suffering. The abdominal pains had continued and were increasing in severity, as was also the difficulty with defæcation and micturition.

Examination under chloroform: Uterus enlarged, ante-flexed, and crowded toward right side of pelvis by a large mass at the left of uterus filling in the left side of the pelvis, bulging Douglas' sac well down into vaginal fornix, occluding rectum, and mounting about two fingers' breadth above pelvic brim. Patient thinks tumour steadily increasing in size. Cervix soft and velvety.

Diagnosis: Ruptured tubal pregnancy with large intraperitoneal hæmatocele. Operation March 21st, 1888. Incision, four inches long, disclosed large tumour (the size of a child's head), encapsulated on all sides by firm, thick layers of plastic lymph and fibrin and by strong organised adhesions lying at left of uterus and crowding it strongly to the right. With the fingers the tumour was rapidly shelled out of its sac-like wall of adhesions and layers of organised lymph, which peeled off easily like the skin of an orange. The sac wall, adherent on all sides to intestines, broad ligaments and uterus, was removed piecemeal. In separating the sac from intestines, the adhesions were so firm as to result in tearing the serous and muscular coats of the gut for some inches. This rent was immediately closed by ten Lembert sutures of iron-dyed silk. The broad ligament was then ligated along its base in mass sutures, carried by Thiersch's spindles, from the infundibulo-pelvic ligament to the cornu of the uterus. The right ovary and tube were held down by adhesions, which were torn up, but the appendages, apparently healthy, were left. The peritoneal cavity was flushed with hot water and a Keith's tube left for twenty-four hours. The recovery was wholly uneventful, union primary, and the patient discharged cured on April 15th.

Specimen, examined by Dr. J. S. Thacher, showed a rupture of the left tube following tubal pregnancy, chorionic villi being abundant in a shaggy patch on the tube walls. No embryo was found, though the large clots removed were carefully hunted over. The patient has now been under observation a year, and has remained in perfect health, working daily as a box-maker. Menstruation is regular. In this

case the thorough and intelligent use of electricity for the purpose of destroying the embryo was followed by no evident amelioration of symptoms, which on the contrary continued to grow worse with an uninterrupted increase in the size of the tumour.

CASE II.—Admitted June 30th, 1888, Mrs. N. J., age 27. No history of syphilis. Menstruation began at 14, at first irregular, every two weeks; flow profuse and painful. Married at 22; had a miscarriage two months later; ten months later gave birth to child at term; two years and three months ago, another miscarriage at fourth month. Has had leucorrhœa as long as she can remember.

Menstruated as usual March 25th. Then did not "see anything" and felt in unusually good health till May 10th; then a little "splash" of blood was noticed, followed by considerable pain in iliac regions. Felt fairly well till May 24th: then had a sudden pain, followed by the discharge of a substance like a piece of white flesh, with many small blood clots. The discharge of blood clots has continued ever since, and during this period she has had frequent attacks of nausea and vomiting, occurring nearly every day, and accompanied with severe cramp-like pains in the lower part of the abdomen, radiating down thighs. Has noticed localised tenderness of abdomen, and that abdomen has been increasing in size since March, also that breasts have become larger and hard. On admission, temperature 99.6°; urine, trace of albumen.

Examination under chloroform: Uterus enlarged, in anterior position, pushed somewhat toward left by a mass lying at its right; mobility diminished. This mass is about the size of two closed fists, bulges in Douglas' sac and postero-lateral fornices of vagina, and partly occludes rectum. Cervix somewhat soft and velvety. Sound passes three and one-half inches, no bleeding. July 7th: mass at right of uterus is smaller and uterus more movable. Pains are less. July 13th: pains much more severe and mass seems larger. Diagnosis: Probable tubal pregnancy.

July 18th: operation. Incision three inches, disclosing

mass the size of two fists at right of uterus, the mass encased in thick adhesions; several large clots in peritoneal cavity. After separating adhesions, mass was found to consist of the fallopian tube ruptured, the ovary, and a mass of partly organised blood clots with fluid dark blood in centre of mass. The mass was removed, and broad ligament ligated and cut away as close to the uterus as possible, and the abdomen cleared of adhesions. The left ovary was fixed by adhesions, which were torn, and the ovary found to be greatly enlarged by multiple hemorrhagic tomata and was, with its tube, removed. Irrigation and drainage with glass tube (Keith's). Tube removed at the end of twenty-four hours. Recovery rapid and uncomplicated. Union primary. Patient discharged cured at end of first month, and has since remained in perfect health. Specimens.—Numerous chorionic villi found in patches near site of rupture of tube, about one inch from cornu uteri, *i.e.*, in isthmus. Embryo found.

In this case we note the fact of the persistence of symptoms and increase in size of the tumour for two months following the date of rupture of tube, which we can fairly place as about May 24th.

CASE III.—Admitted January 4th, 1888, Mrs. M. S., aged 26. Menstruation began at 15, regular and painless; duration three days and moderate. Married at 20; two children, aged 5 and 3 respectively. No miscarriages. Leucorrhœa continuous and excessive for past year. Last menstruation ended December 20th, 1887.

Since birth of last child has had constant backache, bearing-down pelvic pain, and pain in rectum, and persistent leucorrhœa. At this time, at right of uterus and posteriorly a mass the size of an egg was found, fluctuating and tender but somewhat movable; thought to be a hydro- or hydrosalpinx or cystic ovary. Patient was discharged "improved" on January 28th. After leaving hospital patient suffered with constant bearing-down pains, and severe pains in iliac and hypogastric regions. A week after her discharge from hospital there was a sharp metrostaxis lasting some ten days.

many large clots were expelled, with severe abdominal pains, nausea, vomiting, and faintness followed by loss of consciousness. This recurred in July, with clonic spasms during period of unconsciousness. Patient had several of these attacks; cannot tell how many. September 29th: began to flow again, and since that date there has been a constant dark, bloody discharge, with almost constant abdominal pain, nausea and vomiting, fainting attacks, loss of appetite, flesh and strength. Bowels constipated. Micturition difficult.

Re-admitted November 5th, 1888. Urine normal. Examination under chloroform: Uterus slightly enlarged; lies anteriorly and deviated toward left; cervix lacerated, hypertrophic, but soft. Right ovary enlarged, prolapsed, and fixed. Right tube enlarged, fluctuates, and is fixed by adhesions. Left appendages massed in and fixed by adhesions. Diagnosis: Probably pyo-salpinx, double.

Operation, November 15th. Incision three inches. Great omentum stretched over abdominal contents, passing over uterus like a curtain, and generally adherent. Separated by sponge pressure and ligation. Left tube and ovary freed from firm adhesions and removed (tube glued to ovary, which contained a small abscess; tube distended moderately by pus). Right tube and ovary liberated with much difficulty, necessitating enlargement of abdominal wound another inch; brought out intact (though tube was as large as the closed hand and very thin), and removed. Irrigation because of free oozing from torn adhesions, and drainage tube for twenty-four hours. Recovery rapid and uneventful; primary union of wound. Discharged cured December 5th, three weeks later.

Specimen: Right tube was distended to size of closed fist, the dilatation being chiefly at the ampulla, where the fimbriæ were found adherent to a very large and cystic ovary. The contents of this tube were partly fluid and partly solid, and in its widest part could be felt floating a small hard body about the size and shape of a kidney bean. On opening the tube this little body was found to be attached by a small filament to the wall of the tube, and proved to be a disorganised

embryo. Chorionic villi abundant at site of attachment of embryo. The walls of the tube in places were almost the thinness of tissue paper, and seemed on the point of rupture.

In this case again we have a pretty clear history of development of the embryo followed by months of illness, during which the symptoms increased in severity, and the extra-uterine foetal sac did not diminish, but on the contrary, to judge from its appearance, was distending and on the point of rupture.

CASE IV.—Mrs. A. P., age 32. I was asked to see a patient at her home on April 1st by Dr. C. N. Thompson of this city, and the following history was elicited: The patient had been married twelve years; had borne three children, the last one six years ago. No miscarriages. Was perfectly sound and well up to two months ago, when she skipped her regular monthly period. At this time she began at once to have severe acute pain in the right iliac region, of an agonising cramp-like character, and radiating down right thigh, causing cramps and twitchings in right leg. This was followed by frequent and severe nausea and vomiting, terrible pain on defæcation and micturition. Two weeks ago patient noticed a swelling or hard mass in the right iliac region, and since that time she has had a constant metrostaxis, with frequent headache, and sweating. There has been constant throbbing in the region of the mass. Dr. Thompson had observed during the forty-eight hours preceding my visit, that the upper level of the tumour had risen from two fingers above Poupart's ligament to three fingers above the umbilical line. No movement of the bowels could be effected, and the urine was passed with great difficulty and pain. She was at once removed to my ward at Roosevelt Hospital. She was profoundly anæmic and exsanguinated; general condition very poor; poorly nourished. Temperature 102°; pulse 120 and very poor. Urine: trace of albumen. A tumour of large size occupied the hypogastric, right inguinal, and lumbar region, extending up to about three fingers' breadth above the umbilical line. There seemed to be a clear space in the region just at the left of the linea alba, and then another and smaller

mass occupying the left inguinal fossa. Tumours of smooth contour and tense, doughy consistency, very painful to touch. Vaginal examination showed the pelvis filled on all sides with a tense mass bulging down into and partly occluding both vagina and rectum. Uterine body could not be defined. Cervix large, patulous, soft; discharge bloody and dark. Breasts contain milk. Diagnosis: Ruptured tubal pregnancy. Indication for operation, the evidence of continuing internal hæmorrhage.

Operation: Incision five inches, followed by escape of some bright blood and some soft, dark clots, disclosed huge tumour, very tense, of size described, with smooth, bluish-pink surface. The tumour was almost surrounded and overlaid by the colon and meso-colon, and covered in everywhere by thick, greenish-yellow layers of organised lymph. At left of tumour lay large, free, dark blood clots. An attempt was made to clear the mass from the colon, but the density of the adhesions encapsulating the mass rendered this impossible, as they were almost an inch in thickness and of fibrous hardness. Puncture with Tait's trocar let out some fluid blood, but it was necessary to lay open the sac, introduce the whole hand, and turn out the clots. Some pounds of soft clots were thus quickly shelled out, together with several large masses of organised tissue, one, placental with membranes, being as large as a mandarin orange. This was attached firmly to the sac wall formed by intestines and organised lymph and fibrin. Its removal was followed by alarming hæmorrhage, which was controlled by large Keith lion-jaw clamps and by sponge packing. To the left of the large tumour, occupying the left iliac fossa and in front of broad ligament, was a large collection of soft blood clots which had evidently escaped from the larger tumour. The removal of these large masses left large, open sacs, with the intestines and sac walls as their boundaries. These sacs and the general peritoneal cavity were flushed with hot water, and I then (after the method of Miculicz) packed first the smaller cavity at the left iliac fossa, and then the right and larger sac, with iodoform gauze,

stuffing it loosely and rapidly into all the nooks and corners, putting as much in as would fill an ordinary hat, and bringing the ends out through the lower angle of the abdominal wound—which was left open for one and one-half to two inches—together with the handles of the four Keith's clamps. No drainage of peritoneal cavity. The wound was closed rapidly, including all layers in the sutures. Time of operation, twenty-nine minutes. I scarcely expected to get the patient off the table, and hypodermatic injections of whiskey and strophanthus were given freely, followed by hot whisky enemata, elevation of foot of bed, &c. The pulse could scarcely be counted. The patient soon reacted. The clamps were removed in twelve hours, and the gauze gradually withdrawn during the next two days. The patient suffered no pain and did not have a single unpleasant symptom. Her convalescence was as easy and natural as after the simplest operation, and in a little over two weeks she was about the ward, and is now well.

Specimen: Chiefly clots; well-marked placental cotyledons and membranes, but no embryo. No tube or ovary—probably left in sac wall below, as they did not come into view during the operation. The left tube and ovary were seen to be normal.

It is idle to draw deductions from such a small number of cases, but in all such cases there are facts that, carefully studied, ought to be helpful in shedding light upon the much-vexed question of the course and progress, the dangers and the proper treatment, of ectopic gestation.

In the cases I have presented it seems to me that the most significant and striking fact is this: that all danger to the patient does not cease with the death of the embryo, and this leads us naturally to the old query as to whether the destruction of the embryo by electricity is as radical and scientific a procedure as removal by primary laparotomy.

The use of electricity in Case I. was followed later by a large increase in the size of the tumour, and by such general deterioration and symptoms of such gravity as to demand

operative interference. But the electricity was used probably some time after death of embryo and rupture of tube (*vide* history). No evidences of an embryo could be found, and it must have perished some time prior to operation, but the numerous chorionic villi gave indisputable evidence of the nature of the case.

In Case II., two months after the rupture of the tube and death of the embryo, operation was necessitated because of the increasing suffering and steady loss of health and strength.

In Case III. we have the curious history of all the typical symptoms of tubal gestation, and the discovery of the mass months before the operation, and during many months the history of repeated attacks of local peritonitis, frequent metrostaxis, constant suffering, and steady decline in health. Some of these symptoms were probably due to suppurative disease of appendages of other side (left).

In Case IV. we have apparently an abdominal gestation with death of embryo, and later hæmorrhages so extensive and alarming as to seriously jeopardise the patient's life.

I have for a long time inclined to that view—which, as I am aware, is opposed by most of the members of this Society, and, so far as I know, is voiced by only one of our Fellows—which favours primary laparotomy and removal of the tubal ectopic sacs, as opposed to the use of electricity with a view of arresting the gestation; and this view is the result of a careful and thorough study of the entire literature of the subject, and a weighing of all the pros and cons, and is not based upon my very small personal experience, though my own cases and personal observations have tended to confirm convictions previously arrived at. I would not for a moment be interpreted as making the above choice a general rule, for it would be nonsense to urge the general adoption of a capital surgical operation, as against the safe employment of electricity; but, given a skilful abdominal surgeon, it seems to me there can be but one choice.

In primary laparotomy for tubal gestation in these days,

we have the absolute certainty of the immediate and entire removal of all danger by an operation which, in skilful hands, is relatively easy and safe; and to me it appears an unscientific and wholly unsurgical procedure for such men to resort to measures which, though they destroy the embryo, do not by any means grant to the patient the same positive immunity from subsequent dangers.

I have no time, in the limits of this paper, to examine the arguments, but of them all the statistical is to my mind the most fallacious and the least convincing. While I do not for a moment question the accuracy of the diagnosis of many of the reported cases of tubal pregnancy and their prompt arrest and cure by electricity, yet to give credence to all or even many of them, is to give to general and inexperienced testimony a value which it does not deserve. There is no single symptom, and almost no group of symptoms, which lead us to diagnose an ectopic gestation, which may not have their origin in other conditions; and countless errors in diagnosis of this nature constantly occur at the hands of the very masters in this difficult field. How difficult, then, is it to accept much of what is put forth as statistical proof of the greater safety and equal efficiency of what is termed the American method of treatment by electricity.

As yet we have almost no statistics of the safety of the operation of primary laparotomy, but it is strange to hear men argue in favour of electricity because of its safety—men in whose skilful hands a primary laparotomy for tubal pregnancy would be as safe and simple as the operation for a hydro-salpinx.

Statistics will have, for a long time to come, but slight value, and what we need more is a careful study of the dangers and complications which follow in the train of ectopic gestation, even after the embryo shall have perished, and especially the relation of large intra-peritoneal hæmatocèles of obscure origin to ectopic gestation. Were a careful microscopical examination of these cases made, I believe that the proof of their origin in tubal pregnancies would, as in my own cases, often be found where it is now overlooked.

The question of the propriety of operating or of following the expectant plan after rupture has occurred—the patient having survived the primary hæmorrhage and shock, and the effused blood having been shut in by encapsulation—is an interesting one, and one that offers much to be said on both sides. Each case must be judged on its own merits. In three of my cases, probably the patients would have lived and perhaps been cured without operation; but their very existence was embittered by their sufferings, and their usefulness wholly impaired. I succeeded in at once restoring them to health and activity, and they were cases which could not spare themselves for long periods, nor incur the possible risks of suppuration, &c. In the fourth case operation was imperative to save life.

In regard to the treatment of these large intra-peritoneal hæmatoceles, it seems to me that the following are the essential points: Strict asepsis, rapidity of operation, thorough removal of clots and *débris*, arrest of hæmorrhage. If there is no pus the risk of infection is slight. If there are large dead spaces or empty sacs left, we have in the method of Miculicz—*i.e.*, packing them temporarily with gauze—a simple and efficient method of treatment.

In my fourth case the removal of the placenta was against the rules formulated from experience, and was, moreover, accidental. I succeeded, however, in arresting the hæmorrhage from its site by clamps and pressure, and the cure was correspondingly more rapid and satisfactory.

NOTES.

Dr. G. GRANVILLE BANTOCK has been elected an Honorary Member of the Société Belge de Gynécologie et d'Obstétrique.

Dr. ROBERT BARNES has been elected an Honorary Member, and Dr. FANCOURT BARNES an Honorary Corresponding Member, of the Société Impériale de Médecine de Constantinople.

PROFESSOR GIUSEPPE CHIARLEONI director of the Royal School of Obstetrics for Midwives in Vercelli, has been appointed clinical professor at the Royal University of Catania, in place of Professor Mangiagalli, who has resigned.

We have to announce with great regret the death of Professor Macari. He was for many years director of clinical obstetrics in the Royal University of Genoa. His name was familiar to English readers as an industrious and distinguished writer on gynæcology.

The annual meeting of the Royal Maternity Charity was held on January 28th, 1889, at the offices of the Institution, 31, Finsbury Square, E.C. It was stated at the meeting that the Charity had been engaged in the work of delivering poor married women at their own homes for nearly a century and a half. During the past year 3,427 poor married women were delivered of 3,491 children, viz., 1,885 boys and 1,606 girls, 64 being twin cases; 62 boys and 42 girls were stillborn, and 24 infants died shortly after birth.

Porro's operation has lately been practised with considerable success in the various Lying-in Hospitals in Italy. We read in the *Annali di Ostetricia e Ginecologia* that on September 15th, 1889, Dr. Navasquez saved both mother and child by this method at the Maternity of Lucca. On the 5th October, Dr. Scibelli also

saved a mother and child at the Maternity of Naples in a case of osteomalacia. A third case, done on the 14th of the same month in the Hospital of Cesena by Dr. Giommi, resulted in another success both as regards the mother and child. We think the above cases are of great interest as showing the value of this operation in the hands of the obstetrician. The success achieved throws great credit on Italian surgery, and certainly does not seem to call for any aid in the way of modifications, such as that of Säger, of one of the most beautiful and simple surgical proceedings. Let Porro's operation remain unmodified. "Farà da se."

The following is a list of the names of the Committee of Organisation of the Section of Obstetrics and Gynæcology of the tenth International Medical Congress, which will be opened in Berlin on Monday, August 4th, 1890, and will be closed on Saturday, August 9th. Those who take part in the Congress will pay a subscription of twenty marks on being enrolled as members. For this sum they will receive a copy of the Transactions as soon as they appear. Medical students and other persons, ladies and gentlemen, who are not physicians but who take a special interest in the work of a particular sitting, may be invited by the President or be allowed to attend the sitting by special permission. Obstetrics and Gynæcology:—Fritsch, Breslau; Gusserow, Berlin; Hegar, Freiburg; Hofmeyer, Würzburg; Kaltenbach, Halle; Löhlein, Giessen; Martin, Berlin, N.W., Moltkestr. 2; Olshausen, Berlin; Winckel, München. Communications or enquiries regarding the business of separate sections must be addressed to the managing members thereof. All other communications and enquiries must be directed to the General Secretary, Dr. Lassar, Berlin, N.W., 19, Karlstrasse.

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- F.F. BURTON, J. E., *Surgeon to the Liverpool Hospital for Women, 64, Rodney Street, Liverpool.* C. 1884-8. Hon. Loc. Sec.
- 1887 BURY, EDWARD CHARLES, M.R.C.S., L.S.A., M.D., 5, York Row, Wisbech.
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- 1885 BYERS, JOHN WILLIAM, M.A., M.D., M.Ch. (Q.U.I.), M.R.C.S.E., L.M.K. and Q.C.P.I., *Physician for Diseases of Women to the Royal Hospital, Belfast, and Physician to the Belfast Hospital for Sick Children, Lower Crescent, Belfast.*
- 1885 BYFORD, WILLIAM HEATH, M.D., Chicago, U.S.A.
- F.F. BYRNE, JOHN AUGUSTUS, M.B., *Gynecological Surgeon to St. Vincent's Hospital, Dublin, 21, Merrion Square North, Dublin.*
- 1887 CALDWELL, W. SPENCER, M.D., Freeport, Ills., U.S.A.
- 1889 CALLAGHAN, JAMES LESLIE, L.R.C.P. Edin. and L.R.C.S.I., Colyton, Axminster, Devon.
- F.F. CAMBRIDGE, THOMAS ARTHUR, M.R.C.S. Eng., L.S.A., 124, Strand Green Road, Finsbury Park, N. C. 1887-9. V.P. 1890.
- F.F. CAMERON, JAMES, M.D. Aberd., Fenella, Hendon, N.W.
- 1887 CAMERON, J. C., M.D., *Professor of Midwifery, McGill University, 941, Dorchester Street, Montreal.*

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- 1885 CARPRAE, GEORGE M., M.D., 4, Hertford Street, Mayfair, W.
- 1886 CARPENTER, ARTHUR B., M.D., *Physician to Charity Hospital*, Cleveland, Ohio, U.S.A.
- 1886 CARSTENS, J. HENRY, M.D., Detroit, Michigan, U.S.A.
- F.F. CARTER, GEORGE ROE, L.R.C.P.I., L.R.C.S.A., Grasmere Lodge, 3, Anerley Road, S.E.
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- 1889 CASE, ELIAS P., M.D., St. Paul, Minnesota, U.S.A.
- F.F. CASE, WILLIAM, M.R.C.S., L.S.A., 26, Westbourne Road, Arundel Square, N.
- 1889 CATTELL, G. TREW, L.R.C.P. Lond., M.R.C.S. Eng. and L.S.A., Hitchin, Herts.
- 1885 CHAMBERS, P. FLEWELLEN, M.D., 596, Lexington Avenue, New York, U.S.A.
- 1887 CHAMBERS, THOMAS, F.R.C.P. Ed., Sydney, N.S.W.
- F.F. CHANT, THOMAS, M.R.C.S., L.S.A., Glenora, Canfield Gardens, Finchley Road, N.W.
- F.F. CHILD, EDWIN, M.R.C.S.E., Vernham, New Malden, Surrey.
- 1886 *CLABBURN, TOM GEORGE, M.R.C.S. Eng.
- F.F. CLARK, JAMES FENN, M.R.C.S., L.S.A., Clent House, Beauchamp Square, Leamington.
- 1887 CLARKE, ARTHUR, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., Street, Somerset.
- F.F. CLARKE, FINCASTLE GEORGE BARLOW, M.D., C.M., Oak Bank, Lamberhurst, Hawkhurst, Kent, and 5, Austin Friars, E.C.
- 1887 CLARKE, THOMAS KILNER, F.R.C.S. Eng., M.D., M.A., M.B. Cantab., 66, John William Street, Huddersfield.
- 1886 CLEGHORN, GEORGE, M.D. Dur., Blenheim, New Zealand.
- F.F. CLENDINNEN, FREDERICK JOHN, M.D., Melbourne, Australia. Hon. Loc. Sec.
- 1889 CLOSS, JOSEPH OSBORN, M.B. Ed., Dunedin, New Zealand.
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- F.F. COFFIN, THOMAS WALKER, F.R.C.S. Edin., 22, Upper Park Road, Haverstock Hill, N.W.
- F.F. COGHILL, JOHN GEORGE SINCLAIR, M.D., F.R.C.P. Edin., *Physician Royal National Hospital for Consumption, Ventnor*, St. Catherine House, Ventnor, Isle of Wight. C. 1884-7. V.P. 1888.
- F.F. COLE, RICHARD BEVERLEY, M.D., A.M., M.R.C.S. Eng., Ph.D., San Francisco, California, U.S.A.
- F.F. COLEMAN, CHARLES ALFRED, M.D. Edin., Hill View, Streatham Common, S.W.
- 1885 CONDON, JAMES HUNT, M.D. St. Andrews, M.R.C.S., L.S.A., L.M. Dublin, *Surgeon-Major Indian Army Medical Department*, Cawnpore, India.
- 1887 COOK, S. L., M.D., Washington, U.S.A.
- F.F. COONEY, JOHN EDWIN, L.R.C.P., Normand Lodge, West Kensington, S.W.

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- F.F. CORDES, AUGUSTE E., M.D. (Paris), M.R.C.P. Lond., *Privat-Dozent in Midwifery at the Maternity Hospital, Consulting Physician to the Misericordia Lying-in Hospital*, 12, Rue Bellot, Geneva.
- F.F. CRAIGIE, JOHN HAMILTON, F.R.C.S. Edin., *Surgeon-Dentist to the Chelsea Hospital for Women*, 13, Saville Row, w.
- F.F. CRANNY, JOHN JOSEPH, M.D. Dub., A.B., F.R.C.S.I., *Surgeon to the Jervis Street Hospital, Examiner in Midwifery Royal College of Surgeons, Ireland*, 17, Merrion Square North, Dublin.
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- 1886 CRESSWELL, PEARSON ROBERT, F.R.C.S. Ed., Dowlais, Merthyr Tydfil
- 1888 CRICHTON, GEORGE, M.B., L.R.C.S. Ed., 3 Cambridge Villas, Twickenham.
- F.F. CRIPPS, C. COUPER, M.D., M.R.C.S., 187, Camberwell Grove, Denmark Hill, s.e.
- 1888 CRISP, ERNEST HENRY, L.R.C.P., M.R.C.S., The Lawns, Balham Hill Clapham Common, s.w.
- F.F. CROOM, JOHN HALLIDAY, M.D., *Physician to the Royal Maternity Hospital, Edinburgh, President of the Obstetrical Society of Edinburgh*, 25, Charlotte Square, Edinburgh. C. 1884-6. V.P. 1887-9.
- 1887 CROUZAT, E., M.D., 24, Boulevard Sebastopol, Paris.
- 1886 CUSHING, CLINTON, M.D., 636, Sutter Street, San Francisco, U.S.A.
- 1888 CUTHBERT, WILLIAM WOOD, M.R.C.S. Eng., L.S.A. Lond., Mendlesham, Stonham, Suffolk.
- 1885 DANIEL, WOODRUFFE, M.R.C.S. Eng., L.S.A. Lond., Wareham, Dorset
- 1885 DARWIN, GEORGE HENRY, F.R.C.P. Edin., The Cedars, Albert Park Didsbury, Manchester.
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- 1885 DEMPSEY, ALEXANDER, M.D.Q.U.I., L.R.C.S.I., *Physician and Gynaecologist to Extern Department Mater Infirmorum Hospital*, Clifton Street, Belfast.
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- 1886 DEWAR, JOHN, L.R.C.P. Ed., L.R.C.S. Ed., 132, Sloane Street, s.w.
- 1887 DEWES, FREDERICK JOSEPH, L.R.C.P. Lond., M.R.C.S.E., c/o Messrs Binney & Co., Madras, India.
- 1888 DICKEY, SAMUEL, M.D., *Physician to Belfast Lying-in Hospital*, 9, Clifton Street, Belfast.
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- 1886 DICKSON, CHARLES COCHRANE, L.R.C.P. & S. Ed., Bowmont House Willesden Lane, n.w.
- F.F. DINGLE, WILLIAM ALFRED, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A. *Surgeon Royal Maternity Charity*, 46, Finsbury Square, E.C. C. 1889.
- 1887 DINGLEY, WILLIAM, M.R.C.S., L.S.A., 277, Camden Road, n.
- 1888 DIRNER, GUSTAV A., M.D., 4, Hatvani U., Buda-Pesth, Hungary.
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- F.F. DIXON, WILLIAM EDWARD, M.R.C.S., L.S.A. care of B. Skelton, Esq., Woodside, Woodford Wells, Essex.
- 1885 D'MONTE, DOMINIC A., M.D. Brussels, L.R.C.P. Lond., L.M. Ed., Bandora, Bombay. Hon. Loc. Sec.
- F.F. DOLAN, THOMAS M., M.D., F.R.C.S. Edin., Horton House, Halifax, Yorkshire. C. 1886-8. V.P. 1888.
- 1889 DOUGLAS, RICHARD, M.D., Nashville, Tennessee, U.S.A.
- F.F. DRAKE-BROCKMAN, EDWARD FORSTER, F.R.C.S. Eng., L.R.C.P. Lond., care of Messrs. H. K. Lewis, 136, Gower Street, London, W.C.
- F.F. DRAPER, JAMES WILLIAM, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., Almondbury, near Huddersfield.
- 1885 DUDLEY, EMILIUS CLARK, A.B., M.D., *Professor of Gynecology, Chicago Medical College*, 1619, Indiana Avenue, Chicago, U.S.A.
- 1887 DUKE, BENJAMIN, M.R.C.S. Eng., L.S.A. Lond., Windmill House, Clapham Common, S.W.
- 1889 DUKE, EDGAR, M.R.C.S. Eng. & L.S.A., 59, Pevensey Road, St. Leonards-on-Sea.
- F.F. DUNBAR, J. J. MACWHIRTER, M.D., Hedingham House, Clapham Common, S.W. C. 1884-8.
- F.F. DUNDAS, MORDAUNT GEORGE, M.R.C.S., L.S.A., Litcham, Norfolk.
- F.F. EDIS, ARTHUR WELLESLEY, M.D., F.R.C.P., *Obstetric Physician to the Middlesex Hospital, Physician to the Chelsea Hospital for Women*, 22, Wimpole Street, W. Treas. 1884-7. Pres. 1888. C. 1889.
- 1885 EDIS, JOHN BUTLER, M.R.C.S. Eng., L.R.C.P. Ed., *Surgeon to the Hospital for Women, Liverpool*, 169, Islington, Liverpool.
- F.F. EDWARDS, THOMAS E., L.R.C.P. Lond., M.R.C.S.E., 98, Gloucester Crescent, Hyde Park, W.
- F.F. ELDER, GEORGE, M.D., 17, Regent Street, Nottingham. C. 1889.
- F.F. ELLIOT, HENRY FRANCIS, M.R.C.P. Edin., F.R.C.S. Edin., Brook House, Snarresbrook, E.
- 1885 ENGELMANN, GEORGE J., M.D., 3003, Locust Street, St. Louis, U.S.A.
- F.F. ENSOR, EDWIN THOMAS, M.D., 23, Chesterton Road, North Kensington, W.
- 1885 ERSKINE, WILLIAM, M.D., St. And., Tullyellan, Peak Hill, Sydenham.
- 1885 EVANS, EBENEZER RICHARD, L.R.C.P., L.R.C.S. Edin., Llandyssul, South Wales.
- F.F. EVE, RICHARD WAFFORD, M.B., 101, Lewisham High Road, New Cross, S.E.
- 1886 FAIRBANK, HENRY S., M.B., Ch. M., Clydesdale House, North Boulevard, Hull.
- 1885 FEARNLEY, WILLIAM, L.R.C.S. Ed. (1875), 81, Elgin Road, Paddington, W.
- 1886 FENGER, CHRISTIAN, M.D., Chicago, Illinois, U.S.A.
- F.F. FENTON, W. HUGH, M.D. *Physician to the Out-Patients, Chelsea Hospital for Women*, 27, George Street, Hanover Square, W. Hon. Sec. 1890.
- F.F. FENWICK, BEDFORD, M.D., M.R.C.P., *Assistant Physician to the Hospital for Women, and to the City of London Hospital for Diseases of the Chest*, 20, Upper Wimpole Street, W. Libr.: 1887. Hon. Sec. 1888-9.

Elected.

- 1889 FERRÉ, ARTHUR GREGORY, M.B., Toronto, Canada.
 F.F. FITZGERALD, CHARLES EGERTON, M.D., West Terrace, Folkestone.
 C. 1888-9.
 F.F. FLEMING, ROBERT GAGE, M.D., Q.U.I., L.R.C.S. Edin., L.
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 1885 FRASER, GRÆME BISDEE, M.R.C.S., L.S.A., Belvidere, Weston-super-
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 1885 FULLER, LEEDHAM, M.R.C.S. Eng., L.S.A. Lond., Streatham Hill, S.

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 F.F. GARDINER, BRUCE HUBERT JOHN, L.R.C.P. Edin., M.R.C.S., Gloucester
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 F.F. GARDNER, WILLIAM, M.D., *Professor of Gynaecology in McGill University*
 109, Union Avenue, Montreal, Canada. V.P. 1887.
 1885 GILES, PETER, M.R.C.S., L.R.C.P., The Quinta, Brobury, Hereford.
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 1886 GLOSTER, JAMES, M.B., C.M., 15, Upper Phillimore Place, W.
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 1889 GREENE, L. M., M.D. Ohio, 96, Broadway, New York.
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 C. 1884-6. Hon. Sec. 1886-7. V.P. 1888.
 1885 GRIMSDALE, THOMAS BABINGTON, M.B., M.R.C.S., 29, Rodney Street
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- 1886 HANKS, H. T., M.D., 55, East 59th Street, New York, U.S.A.
- F.F. HARKNESS, ALEXANDER, L.R.C.P. Edin., 4, Oak Villas, St. Anne's Road, Stamford Hill, N.
- F.F. HARPER, CHARLES JOHN, L.R.C.P. Lond., M.R.C.S. Eng., Church End, Finchley, N.
- 1886 HARPER, GERALD, M.B., *Physician to the Out-Patients, Chelsea Hospital for Women*, 5, Hertford Street, Mayfair, W.
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- F.F. HARRIES, THOMAS DAVIES, L.R.C.P. Lond., F.R.C.S. Eng., L.S.A., Grosvenor House, Aberystwith.
- F.F. HARRIS, WILLIAM HENRY, M.D., 78, Oxford Gardens, North Kensington, W.
- 1885 *HARRISON, THOMAS, A.M., M.D., Ch.M. Univ., Dublin.
- F.F. *HARTNETT, JOHN J., M.D., M.Ch., L.M. Royal Univ., L.A.H. Dub.
- F.F. *HARWOOD, SWEITZER SOUTTER, M.D., L.K.Q.C.P.I.
- 1888 HASARD, JOHN, M.R.C.S., L.S.A. Lond., 5, Norfolk Street, Strand, London.
- F.F. HASLAM, WM. DOIGE, M.R.C.S. Eng., L.S.A., 19, Mecklenburgh Square, W.C.
- 1885 HAULTAIN, FRANCIS NICOL, M.B. Ed., 27, Northumberland Street, Edinburgh.
- 1889 HAWKES, A. E., M.D., L.R.C.P. Edin., L.R.C.S. Edin. and L.M., 22, Abercromby Street, Liverpool.
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- 1886 HEADLEY, W. BALLS, M.A., M.D., M.R.C.P., 17, Collins Street East, Melbourne.
- 1887 HEALD, BENJAMIN GRAY, L.R.C.P. Ed., L.F.P.S.G., Red House, East Street, Leeds.
- F.F. HEBERT, PAUL ZOTIQUE, M.D., C.M., L.R.C.P. Lond., 54, Berners Street, Oxford Street, W.
- 1885 HEIBERG, WILHELM, M.D., Frederikshospital, Copenhagen.
- 1889 HELLIER, JOHN B., M.D. Lond., Headingley, near Leeds.
- 1885 HENSMAN, FRANK HENRY, M.R.C.S. Eng., *Surgeon-Major, Army Medical Staff*, Windsor Barracks.
- 1887 HETHERINGTON, GEO. ALBERT, M.D., St. John, N.B., Canada.
- F.F. *HEWITT, JOHN, M.R.C.P. Edin.
- F.F. HICKS, GEORGE BORLASE, M.R.C.S., L.M. Eng., L.R.C.S. Edin., 149, Amherst Road, Hackney, E.
- 1885 HILL, J. WOOD, L.R.C.P., M.R.C.S., Clovelly, Westgate-on-Sea.
- F.F. HILLS, AUGUSTUS PHILLIPS, M.R.C.S. Eng., Carlton House, Prince of Wales Road, Battersea Park, S.W. C. 1888-9.
- F.F. HINE, ALFRED LEONARD, L.R.C.P. Lond., M.R.C.S., L.S.A., Eppingdale, Leytonstone Road, E.
- 1887 HITCHINS, THOMAS J., M.D., M.R.C.S., L.R.C.P., &c., Broadfield, Crawley, Sussex.
- 1886 *HOAG, JUNIUS C., M.D.
- F.F. HOCKEN, CHARLES EDWARD, M.D., Cleveland House, Palmerston Road, Wood Green, N.

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- F.F. HODGSON, ROBERT HUGH, L.R.C.P. Edin., M.R.C.S. Eng., 204, Ry Lane, Peckham, S.E.
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- 1885 HOOPER, JOHN WILLIAM DUNBAR, L.R.C.P. Edin., L.R.C.S. Edin. *Surgeon to the Women's Hospital, Melbourne*, 54, Collins Street East Melbourne.
- 1889 HOPKINS, JAMES B., M.D., Parkerville, Kansas, U.S.A.
- 1885 HOUGH, JAMES HAYWARD, M.A., M.R.C.S., Fern House, Trumpington Street, Cambridge.
- F.F. HOWELL, HORACE SYDNEY, M.D., F.R.C.S., 18, Boundary Road, St John's Wood, N.W.
- 1887 HUMISTON, WILLIAM H., M.D., Cleveland, Ohio, U.S.A.
- 1885 HUNTER, JAMES BRADBRIDGE, M.D., 2, East Thirty-third Street, New York, U.S.A.
- 1887 HUTCHISON, GEORGE WRIGHT, M.D. Aber., M.R.C.P. Edin., Chipping Norton, Oxon.
- 1885 IMLACH, FRANCIS, M.D. Edin., M.R.C.S. Eng., *Honorary Medical Officer, Hospital for Women, Liverpool*, 16, Canning Street, Liverpool C. 1887-9.
- 1887 INGLEBY-MACKENZIE, JOHN, M.B. Cantab., M.R.C.S., L.S.A., 47, Welbeck Street, W.
- F.F. ISDELL, FITZGERALD, A.B., M.B. Dub., 43, Great St. Andrew Street W.C.
- 1885 JACKSON, A. REEVES, M.D., 271, Michigan Avenue, Chicago, U.S.A.
- 1886 JACKSON, JAMES, M.R.C.S., L.S.A., 14, Huntingdon Street, Barnsbury, N.
- F.F. JACKSON, THOMAS VINCENT, F.R.C.S. Edin., *Senior Surgeon to the Wolverhampton and Staffordshire General Hospital*, Whetstone House, Wolverhampton. C. 1884.
- 1886 JAGGARD, WILLIAM WRIGHT, M.D., 2330, Indiana Avenue, Chicago, Ill., U.S.A.
- F.F. JAMES, W. CULVER, M.D., 11, Marloes Road, Kensington, S.W. C. 1884.
- 1887 JAMIESON, ARCHIBALD, M.D., C.M. Queen's University, Kingston, Ontario, L.S.A. Lond., Kars, Ontario, Canada.
- 1885 JAMIESON, ROBERT ALEXANDER, M.D.Q.U.I., Shanghai, China.
- F.F. JAY, HENRY MASON, M.D. Aberd., Chippenham, Wilts.
- 1887 JESSETT, FREDERIC BOWREMAN, F.R.C.S. Eng., *Surgeon to the Cancer Hospital, Brompton*, 16, Upper Wimpole Street, W.
- 1885 JEWETT, CHARLES, M.D., 307, Gates Avenue, Brooklyn, U.S.A.
- F.F. JOHNSON, JAMES BOVELL, M.D., M.Ch., Montreal, L.S.A. Lond., Mickleton, Campden, Gloucestershire.
- 1886 JOHNSON, JOSEPH TABER, M.D., *Professor of Obstetrics*, 926, Farragut Street, N.W., Washington, U.S.A.
- 1886 JOHNSTON, JOHN, M.R.C.S. Eng., 2, Rocky Hill Terrace, Maidstone.

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- 1885 JOHNSTON, WILLIAM BEECH, M.D., 157, Jamaica Road, s.e.
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 1888 JONES, DAVID OGDEN, M.D. Mich., L.R.C.P. Lond., Toronto, Canada.
 F.F. JONES, H. MACNAUGHTON, M.D., *Examiner in Midwifery, Royal University, Ireland*, 141, Harley Street, w. C. 1890.
 1887 JONES, JAMES THORESBY, M.R.C.S., L.R.C.P.E., L.M., 103, Sutherland Avenue, w.
 F.F. JONES, LEWIS, M.D., M.R.C.S., Oakmead, Balham, s.w.
 1885 JOUBERT, CHARLES HENRY, M.B. Lond., F.R.C.S. Eng., *Acting Professor of Midwifery, Calcutta*, 56, Chowringhee, Calcutta.
- 1885 *KEENAN, ALFRED J. W., M.D., L.R.C.S., L.R.C.P. Edin., L.M.
 1889 KELLER, OTTO E., M.D., 46, Finsbury Square, E.C.
 1886 KELLETT, ROBERT GUY, L.K.Q.C.P.I., The Pitchards, Halstead, Essex.
 1889 KELLOGG, J. H., M.D., Battle Creek, Michigan, U.S.A.
 F.F. KEMPSTER, HENRY, M.B., M.R.C.S., Hastings House, Lavender Hill, Clapham Junction, s.w.
 F.F. KENNEDY, HUGH B., L.R.C.S.I., *Assistant Surgeon to the Mater Misericordia Hospital*, 1, Gardiner's Place, Dublin.
 F.F. KENNEDY, JOHN BLYDESTYN, M.R.C.S. Eng., L.S.A., Stratford Hall, Stratford, E.
 1885 KENNEDY, SAMUEL, F.R.C.S., L.R.C.P. Edin., 22, George Street, Hanover Square, w.
 F.F. KIALLMARK, HENRY WALTER, M.R.C.S., 5, Pembridge Gardens, Bayswater, w.
 1886 KING, ALBERT F. A., M.D., 726, 13th Street, Washington, U.S.A.
 F.F. KNOTT, CHARLES, M.R.C.P. Edin., Liz Ville, Elm Grove, Southsea.
 1886 KNOX, J. SUYDAM, M.D., 14, Loomis Street, Chicago, Illinois, U.S.A.
- 1886 LAKE, WILLIAM WELLINGTON, M.R.C.S., Grove Road, Walthamstow, Essex.
 F.F. LAMPREY, RICHARD ORFORD, L.R.C.P. and L.R.C.S. Edin., 62, East Hill, Wandsworth, s.w.
 1890 LANGLEY, AARON, L.R.C.P. Edin. and L.M., L.R.C.S. Edin., 149, Walworth Road, s.e.
 F.F. *LARKIN, FRANK COLET, M.B., C.M. Edin.
 1886 LAWRIE, JAS. MACPHERSON, M.D., *Physician to the Weymouth Sanatorium*, Greenhill, Weymouth.
 F.F. LEBLOND, ALBERT, M.D., *Alldécin de Saint-Lazare*, 54, Rue d'Hauteville, Paris.
 F.F. LEICESTER, AMBROSE WILLIAM MONTAGUE, M.B., C.M. Edin., 58, Catherine Street, Liverpool.
 1889 LEIGH, W. W., L.R.C.P. Edin., M.R.C.S. Eng., L.S.A., Glyn Bargoed, Trecharris, R.S.O., South Wales.
 F.F. LE PAGE, JOHN FISHER, M.D., L.R.C.P. Edin., 17, The Crescent, Salford, Manchester.
 1888 LESLIE, ROLPH, M.D., M.R.C.P. Lond., 48, Lupus Street, s.w.

Elected.

- F.F. LESLIE, WILLIAM MURRAY, M.B., C.M., Edin., 541, Manchester Road, Cubitt Town, E.
- F.F. LEWIS, HENRY, M.D., West Terrace, Folkestone.
- F.F. LIGERTWOOD, THOMAS, M.D., Royal Hospital, Chelsea, S.W.
- 1889 LIGHT, E. MELLOR, M.A., M.B., 79, Lambeth Palace Road, S.E.
- F.F. LLEWELLYN, REES RALPH, L.R.C.P. Lond., M.R.C.S. Eng., L.S.A. 152, Whitechapel Road, E.
- F.F. LLOYD, SAMUEL, M.D., 4, High Street, Bloomsbury, W.C.
- 1885 LONG, FREDERICK WILLIAM DEVEREUX, L.S.A., 31, Finsbury Square, E.C.
- F.F. LOW, RICHARD MARSDEN PILKINGTON, M.B., L.M. Edin., L.R.C. Edin., L.R.C.S. Edin., L.M., 2, Nevern Road, Nevern Square, S.W.
- F.F. *LUNDY, LOUIS FRANCIS, M.R.C.S. Eng., L.S.A. Lond., L.M.
- 1885 LUSK, WILLIAM T., M.D., 47, East Thirty-fourth Street, New York U.S.A. V.P. 1887.
- F.F. LYCETT, JOHN ALLAN, M.D., M.R.C.P. Edin., The Hollies, Graislea Wolverhampton. Hon. Loc. Sec. C. 1889.
- F.F. MACAN, ARTHUR VERNON, B.A., M.B. Dub., M.Ch., M.A.O., *Ex-Mast. of the Rotunda Hospital, Dublin*, 53, Merrion Square, Dublin. V.P. 1887. Pres. 1889. C. 1890.
- 1885 MACAN, JAMESON JOHN, M.A., M.R.C.S., 62, George Street, Portman Square, W.
- F.F. MACCALLUM, DUNCAN C., M.D., 45, Union Avenue, Montreal, Canada.
- 1885 *MACDONNELL, MARK ANTONY, M.D., M.Ch., L.M. (Q.U.I.)
- F.F. MACGAVIN, JOHN, L.R.C.P., L.R.C.S.E., 72, Trafalgar Road, Greenwich, S.E.
- 1885 MCGEAGH, WILLIAM, M.D. Roy. Univ. Ireland, M.R.C.S. Eng., 20 Spellow Lane, Liverpool.
- 1889 MACKAY, W.A., M.D., Huelva, Spain.
- 1886 MACKENZIE, WILLIAM G., F.R.C.S. Ed., 92, Richmond Terrace, Belfast.
- F.F. MACKERN, JOHN, M.D. Cantab., 30, Cambridge Street, Hyde Park, W.
- 1885 MACKIE, JOHN, L.R.C.P., L.F.P.S. (Edin. and Glasgow), Thornhill, Dumfriesshire.
- 1888 MACKINTOSH, G. D., M.D. Aberd., Archer's Lodge, Harpurhey, Manchester.
- 1888 MACPHATTER, N. LINCOLN, M.D., Guelph, Canada.
- 1886 MACPHERSON, CHARLES, M.B. Glas., Bonar Bridge, Sutherlandshire, N.B.
- 1887 MANSER, FREDERICK, M.R.C.S. Eng., The Priory, Church Road, Tunbridge Wells.
- 1888 MANTON, WALTER PORTER, M.D., 43, Watson Street, Detroit, Mich., U.S.A.
- 1887 MARLEY, HENRY FREDERICK, M.R.C.S.E., L.R.C.P., L.S.A., L.M., The Nook, Padstow, Cornwall.
- F.F. MARSH, THOMAS CHARLES, M.R.C.S. Eng., L.R.C.P. Edin., 56, Fitzroy Street, Fitzroy Square, W.
- F.F. MASSON, GEORGE BLAKE, L.R.C.S., L.R.C.P., L.M., Hill House, Saxlingham, near Norwich.

Elected.

- 1889 MAUNSELL, HENRY WIDENHAM, M.B. Dub., Dunedin, New Zealand.
- 1886 MAURY, R.B., M.D., Memphis, Tennessee, U.S.A.
- 1887 McCRIMMON, M., M.D., M.R.C.S. Eng., Palermo, Ontario.
- 1887 McMORDIE, W. K. M., M.D., 17, College Square East, Belfast.
- 1887 McMULLEN, WILLIAM, L.K.Q.C.P.I., L.R.C.S.I., L.M. Dublin, 319A, Brixton Road, s.w.
- 1887 MENDES DE LEON, M.A., M.D., Kloveniersburgwal 94, Amsterdam.
- 1886 MERRIMAN, HENRY P., M.D., 2239, Michigan Avenue, Chicago, U.S.A.
- 1889 MERRITT, Dr., St. Catherine's, Ontario, Canada.
- F.F. MILLER, ANDREW, M.D. Edin., 5, Grosvenor Street, w.
- 1886 MILLER, DE LASKIE, M.D., *Professor of Obstetrics, Rush Medical College, 2,011, Prairie Avenue, Chicago, U.S.A.*
- 1888 MOIR, JOHN, M.D., Hack Road, Victoria Docks, Canning Town, E.
- F.F. MOORE, STEPHEN HENRY, F.R.C.S.E., *Medical Superintendent of Chelsea Infirmary, Cale Street, s.w.*
- 1889 MOOTOOSAWMY, M. C., F.L.S., Tangore, Madras, East India.
- 1887 MORISON, ALBERT EDWARD, M.B.C.M. Ed., M.R.C.S., Hartlepool.
- F.F. MORTON, THOMAS, M.D. Lond., M.R.C.S., L.S.A., *President of the Harveian Society of London, 1, Greville Road, Kilburn, N.W.*
C. 1888-9.
- F.F. MOULLIN, J. A. MANSELL, M.D., M.R.C.P., *Physician to the Hospital for Women, Soho; Assistant Physician for Diseases of Women to the West London Hospital, 69, Wimpole Street, w.*
C. 1884. Hon. Sec. 1887-8. V.P. 1889.
- 1887 MOWAT, DANIEL, M.D., Holmwood, Stamford Hill, N.
- 1885 MUNDÉ, PAUL F., M.D., 20, West Forty-fifth Street, New York, U.S.A.,
Professor of Gynaecology at the New York Polyclinic, and at Dartmouth College.
V.P. 1886.
- F.F. MUNRO, ROBERT H., M.B., C.M. Edin., Friockheim, Forfarshire.
- F.F. MURPHY, JAMES, M.D., *Surgeon to the Sunderland Hospital for Women and Children, Holly House, Sunderland.*
Hon. Lcc. Sec. C. 1889-90.
- 1887 MURRAY, CHARLES STORMONT, L.R.C.S. Ed., L.S.A., L.M. Ed., 34, Gloucester Place, Portman Square, w.
- 1885 MURRAY, ROBERT MILNE, M.B. Edin., M.R.C.P. Edin., *Secretary, Edinburgh Obstetrical Society; Lecturer on Gynaecology, Edinburgh School; Physician for Diseases of Women to the Western Dispensary, 10, Hope Street, Edinburgh.*
C. 1886.
- F.F. MUTCH, F. ROBERTSON, M.D., C.M. Aberd., 2, West Street, Sneinton, Nottingham.
- 1889 NAUMANN, J. C. F., L.R.C.P. Lond., M.R.C.S. Eng., L.S.A., 125, Gower Street, w.c.
- 1888 NEATBY, EDWIN H., M.D. Brussels, L.R.C.P. Lond., M.R.C.S. Eng., 161, Haverstock Hill, N.W.
- 1886 NELSON, DANIEL THURBER, M.D., 2400, Indiana Avenue, Chicago, U.S.A.
- F.F. NETHERCLIFT, WILLIAM HENRY, F.R.C.S. Eng., Junior Athenaeum Club, Piccadilly, w.
- F.F. NEUGEBAUER, FRANZ, M.D., *Assistant de la Clinique Gyniatrique à l'Université de Varsovie, Leszuo, 28, Warsaw, Russia (Poland).*
V.P. 1887.

Elected.

- 1886 NEWTON, J. LAWRENCE, M.R.C.S., 4, Hyde Terrace, Melbourne Street South Brisbane, Queensland.
- F.F. NOBLE, JAMES BLACK, M.R.C.S. Eng., L.R.C.P. & L.M. Edin. 51a, Trinity Square, Borough, S.E.
- F.F. NUNN, T. W., F.R.C.S., *Consulting Surgeon, Middlesex Hospital*, 8, Stratford Place, W. C. 1884. V.P. 1886.
- F.F. NUTT, WILLIAM ANTHONY, L.S.A. Lond., Craven House, Northumberland Avenue.
- 1885 O'DONNELL, THOMAS J., L.K.Q.C.P.I., L.M., L.R.C.S.I., Oorgaur Mysore State, India.
- 1889 O'CALLAGHAN, RICH. THOS. ALEXR., L.K.Q.C.P.I., F.R.C.S.I., T Bungalow, Carlou.
- F.F. OLIVER, JOHN FERENS, M.D., Ch.M. Edin., L.R.C.P.E. and L.R.C.S.E., 2, Hertford Gardens, Albert Bridge, S.W.
- 1885 ORAM, RICHARD R. W., L.R.C.P. Lond., M.R.C.S.E., Cremyll, Wandsworth Common. C. 1890.
- 1889 OSTROM, H. J., M.D., 2, West Eighth Street, New York, U.S.A.
- 1887 OVENS, THOMAS, M.D., M.C., M.C.P.S., Arkona, Ontario, Canada.
- F.F. PADMAN, JOHN, M.R.C.S. Eng., 22, Bloomsbury Square, W.C.
- 1888 PARKINSON, J. TAYLOR, M.D., Brook View, Crystal Brook, South Australia.
- 1886 PARSONS, JOHN INGLIS, M.D. Dur., *Physician to the Out-Patient, Chelsea Hospital for Women*, 9, Collingham Place, S.W. C. 1890.
- 1887 *PEARSE, T. FREDERICK, M.D. Bruss., L.R.C.P. Lond.
- 1890 PHILLIPS, FRANK LESLIE, M.D. Brux., 393, Moseley Road, Birmingham
- F.F. PICKETT, JACOB, M.D. St. And., L.R.C.P. Edin., L.M., M.R.C.S. Eng., L.M., L.S.A., 26, Colville Square, W.
- F.F. PIGG, THOMAS, M.D., *Consulting Physician to the Manchester Southern Hospital for Women and Children*, Bellagio, East Grinstead, Surrey.
- F.F. PINARD, ADOLPHE, M.D., *Professeur agrégé de la Faculté, Accoucheur à Lariboisière*, 11, Rue Rocquépine, Paris.
- 1888 PITCAIRN, JOHN JAMES, L.R.C.P. Lond., M.R.C.S. Eng., 8, Parkhurst Road, Holloway, N.
- F.F. PLATT, WILLIAM HENRY, L.R.C.P. Edin., L.R.C.S.I., St. James's Lodge, West End Lane, Hampstead, N.W. C. 1890.
- 1887 POCOCK, FREDERICK ERNEST, M.D., M.R.C.S. Eng., L.S.A., The Limes, St. Mark's Road, North Kensington, W.
- 1885 POLK, WILLIAM M., M.D., *President New York Obstetrical Society*, 13, East Thirty-fourth Street, New York, U.S.A.
- 1885 POOLEY, RICHARD CHARLES MASON, L.K.Q.C.P.I., Pensilva, Falmouth.
- 1886 POPE, HARRY CAMPBELL, M.D., F.R.C.S. Lond., 280, Goldhawk Road, Shepherd's Bush. C. 1890.
- 1886 PORTER, P., M.D., 33, Adams Avenue, East Grand Circus Park, Detroit, Michigan, U.S.A.
- 1888 POWELL, HENRY WILLIAM, L.R.C.P., National Conservative Club, Pall Mall, and P. and O. SS. "Victoria."
- F.F. *PRENDERGAST, J. MORGAN, M.D., M.C., M.R.C.S., L.M.
- 1887 PRICE, JOSEPH, M.D., 500 N. 20th Street, The Preston Retreat, Philadelphia, U.S.A.

Elected.

- F.F. PRIDHAM, CHARLES WM., F.R.C.S. Edin., M.R.C.P. Edin., 10, Cromwell Crescent, West Cromwell Road, s.w.
- 1886 PRINGLE, JAMES HOGARTH, M.B., C.M., Torquhan, Stow, N.B.
- 1885 *PROCKTER, ALFRED EDGCUMBE, M.R.C.S. Eng., L.R.C.P. Edin.
- F.F. PURCELL, FERDINAND ALBERT, M.D., M.Ch., R.V.I., M.R.C.S., L.M., Eng., *Surgeon to the Cancer Hospital, Brompton*, 7, Manchester Square, w. C. 1888-9.
- 1886 PURDON, RICHARD J., M.D., M.Ch., 14, College Square East, Belfast.
- F.F. PUREFOY, RICHARD DANCER, M.B., *Obstetric Surgeon, Adelaide Hospital*, 13, Merrion Square, Dublin. C. 1884-7.
- 1887 RAE, GEORGE A., L.R.C.P., L.R.C.S. Ed., 1, Outram Terrace, Stoke, Devonport.
- 1887 RANNAY, GEORGE E., M.D., Lansing, Michigan, U.S.A.
- F.F. RASCH, ADOLPHUS A. F., M.D., M.R.C.P., *Physician for Diseases of Women and Children to the German Hospital; Physician to Training Hospital, Tottenham*, 7, South Street, Finsbury, E.C.
- F.F. RAWLINGS, JOHN ADAMS, M.R.C.P. Edin., *Physician to the Swansea Hospital*, 4, Northampton Terrace, Swansea. C. 1888-9.
- 1887 *READMAN, T., L.R.C.P. Ed., L.M., &c.
- 1887 REED, CHARLES A. L., M.D., Cincinnati, Ohio.
- F.F. REEVES, HENRY ALBERT, F.R.C.S. Edin., *Assistant Surgeon, London Hospital, Surgeon to the Hospital for Women*, 7, Grosvenor Street, w. C. 1884.
- 1887 REID, GODFREY FORREST, M.D., Bethlehem, Orange Free State, S. Africa.
- F.F. REID, W. LOUDON, M.D. Glas., *Lecturer on Midwifery and Diseases of Women and Children, Western Medical School, Glasgow; Physician to the Glasgow Maternity Hospital*, 7, Royal Crescent, Glasgow. C. 1888-9.
- F.F. RICHARDSON, JOHN HUMPHREY HOWARD, M.R.C.S., L.S.A., 22, North Street, Wandsworth, s.w.
- 1887 RICHMOND, THOMAS, L.R.C.P.E., L.F.P.S.G., 26, Burnbank Terrace, Glasgow.
- 1888 RICKETTS, E. S., M.D., 93, East Fourth Street, Cincinnati, Ohio, U.S.A.
- F.F. RILEY, JAMES, L.R.C.P. Edin., M.R.C.S. Eng., L.M., L.S.A., 131, St. George's Road, South Belgravia, s.w.
- F.F. ROBERTS, D. LLOYD, M.D., F.R.C.P., F.R.S. Edin., *Obstetric Physician to the Manchester Royal Infirmary, Physician to St. Mary's Hospital, Manchester, and Lecturer on Clinical Midwifery and the Diseases of Women in Owens College*. C. 1884. V.P. 1886.
- F.F. ROBERTS, THOMAS, L.S.A. Lond., Falloden House, 81, Tredegar Road, Bow, E.
- F.F. ROBERTSON, A. MILNE, M.D. Edin., Gonville House, Roehampton, s.w.
- 1886 ROBINSON, JOHN, M.D., F.R.C.S. Eng., Midhurst, Sussex.
- 1888 ROBSON, ARTHUR W. MAYO, F.R.C.S. Eng., L.R.C.P. Lond., Hillary Place, Woodhouse Lane, Leeds.
- F.F. ROOTS, WILLIAM HENRY, M.R.C.S. Eng., Kingston-on-Thames.
- 1885 ROSEBRUGH, JOHN WELLINGTON, M.D., Hamilton, Ont., Canada.
- 1888 ROSS, JAMES F. W., Wellesley and Sherborne Streets, Toronto, Canada.

Elected.

- F.F. ROUTH, CHARLES HENRY FELIX, M.D., M.R.C.P., *Consulting Physician to the Samaritan Free Hospital, 52, Montague Square, w.*
V.P. 1884-7. C. 1888.
- F.F. RUSSELL, LOGAN D. H., M.D., M.R.C.S., Government Park, St. Catherine, Jamaica.
- 1885 RUTHERPOORD, HENRY TROTTER, B.A., M.B. Cantab, M.R.C.P. Lond., *Physician to the Out-Patients, Chelsea Hospital for Women, Surgeon, Royal Maternity Charity, 46, Queen Anne Street, w.*
- F.F. RYLEY, J. BERSFORD, M.D., M.R.C.S., L.R.C.P., 1, Bentinck Street, Manchester Square, w.
- F.F. SALTER, THOMAS KNIGHT, M.R.C.S. Eng., L.F.P.S.G., 23, Lower Seymour Street, w.
- F.F. SAVAGE, THOMAS, M.D., *Surgeon, Birmingham and Midland Hospital, 32, Newhall Street, Birmingham.* C. 1884-6. V.P. 1887.
- 1886 SAWYER, EDWARD WARREN, M.D., 3733, Vincennes Avenue, Chicago, U.S.A.
- 1889 SCOTT, ALEXANDER THOMAS, M.R.C.S. Eng. and L.S.A., 8, Parkhurst Road, Camden Road, n.
- 1887 SHAW, JOHN, M.D. Lond., M.R.C.P. Lond., Burlington House, Wiltoughby Road, Hampstead, n.w. C. 1888.
- F.F. SHAW, JOSEPHUS, M.D. Heidelberg, M.R.C.S. Eng., L.S.A. Lond., 151, Lower Road, Rotherhithe, s.e.
- 1887 SHELLEY, P. A., M.D., Shelbyville, Kentucky, U.S.A.
- F.F. SHEPPARD, WILLIAM DAVID, L.R.C.P. Edin., L.R.C.S.
- 1886 SHERRARD, CÆSAR DUDLEY, L.K.Q.C.P., M.R.C.S., The Avenue, Eastbourne.
- 1886 SIMMONS, HENRY FOURNESS, M.B., C.M., 30, Alberto Terrace, Darlinghurst, Sydney, New South Wales.
- 1889 SIMPSON, ALEXANDER RUSSELL, M.D., *Professor of Midwifery and Diseases of Women, Edinburgh University, 52, Queen Street, Edinburgh.* V.P. 1890.
- 1887 SIMPSON, DAVID, M.B., C.M. Aber., care of Messrs. Arbutnot & Co., Madras.
- 1885 SIMPSON, JAMES HERBERT, M.D. Aberd., The Crescent, Rugby. C. 1887.
- 1888 SIMPSON, ROBERT MILLS, 84, Mercers Road, Holloway, n.
- 1887 *SINCLAIR, DUGALD, M.B., C.M.
- 1885 SINCLAIR, WILLIAM JAPP, M.D. Aber., *Physician to the Manchester Southern Hospital, 268, Oxford Road, Manchester.* C. 1887.
- 1885 SKENE, ALEXANDER J. C., M.D., 167, Clinton Street, Brooklyn, N.Y., U.S.A.
- F.F. SLIMON, WILLIAM, M.B. Glas., 4, York Place, Bow Road, e.
- 1886 SLOAN, SAMUEL, M.D., *Physician to the Glasgow Maternity Hospital, 5, Somerset Place, Sauchiehall Street West, Glasgow.* C. 1889-90.
- 1887 SMART, DAVID, M.B., B.Sc. Edin., 1, Hartington Road, Liverpool.
- 1889 SMITH, ALFRED J., M.B., Rotunda Hospital, Dublin.
- F.F. SMITH, E. T. AYDON, L.S.A., Disco House, 10, Alexandra Road, St. John's Wood, n.w.
- 1887 SMITH, GEORGE COCKBURN, M.D. Bruss., M.R.C.S. Eng., L.R.C.P., L.R.C.S. Edin., 187, Lavender Hill, s.w.

Elected.

- F.F. SMITH, GILBERT THOMAS, M.R.C.S., L.S.A., Alrewas, Burton-on-Trent.
- 1885 SMITH, HENRY HADLEY, M.D., Sheffield, Mass., U.S.A.
- F.F. SMITH, HEYWOOD, M.A., M.D., M.R.C.P., 18, Harley Street, w.
Hon. Sec. 1884-5. C. 1889-90.
- 1885 *SMITH, HOWARD LYON, L.R.C.P. Lond., M.R.C.S. Eng.
- 1886 SMITH, JAMES, F.F.P.S. Glasg., Snugville, Shanklin Road, Belfast.
- 1886 SMITH, JAMES GREIG, M.A., M.B. & C.M., *Assistant Surgeon to the Bristol Infirmary*, 16, Victoria Square, Clifton, Bristol.
C. 1887-9. V.P. 1890.
- F.F. SMITH, RICHARD T., M.D., *Physician to the Hospital for Women, Soho*, 17, George Street, Hanover Square, w.
C. 1884-7. Hon. Sec. 1889-90.
- F.F. *SMITH, R. W. BRUCE, M.D.
- F.F. SMYLY, W. JOSIAH, M.D., F.K.Q.C.P., *Examiner in Midwifery, R.C.S. Dublin, Gynaecologist to the City of Dublin Hospital*, 56, Fitzwilliam Square, Dublin.
C. 1888-90.
- F.F. SMYTH, BRICE, M.B., 13, College Square East, Belfast.
C. 1887. V.P. 1889.
- F.F. SOUTTER, MANSFIELD COLLIER, M.R.C.S. Eng., 8, Cumberland Terrace, Finsbury Park, N.
- F.F. SPANTON, W. DUNNETT, F.R.C.S. Edin., *Surgeon to the North Staffordshire Infirmary*, Chatterley House, Hanley, Staffordshire.
C. 1887-9. V.P. 1890.
- 1885 SPEDDING, BENJAMIN HENRY, L.R.C.P., L.R.C.S. Edin., *Lecturer on Diseases of Women at the Ulster Hospital*, Belfast.
- F.F. STACK, JOHN JOSEPH, L.R.C.P. Edin., L.M., L.R.C.S.I., L.M. Coombe Hospital, Dublin, 15, Eliza Terrace, Stamford Hill, N.
- 1885 STEELE, CHARLES EDWARD, M.R.C.S. Eng., L.S.A. Lond.
- F.F. STEER, WILLIAM, M.R.C.S., L.S.A., *Medical Superintendent, Fulham Union Infirmary*, Fulham Palace Road, Hammersmith, w.
- 1889 STEKOULIS, CONSTANTIN, M.D., Constantinople.
- 1885 STEVENSON, EDMUND SINCLAIR, L.R.C.P. Edin., M.R.C.S. Eng., Rondebosch, Cape of Good Hope.
- 1888 STONE, ISAAC S., M.D., Lincoln, Virginia, U.S.A.
- 1885 STRANGE, FREDERICK WILLIAM, M.R.C.S. Eng., M.C.P. & S. Ontario, 218, Simcoe Street, Toronto.
- 1886 STRANGE, W. HEATH, M.D., 5, Grosvenor Street, w.
- 1886 STUBBS, PERCY BELFORD TRAVERS, L.R.C.P., L.R.C.S., 4, Montrose Villas, The Terrace, Hammersmith, w.
- 1885 SUNDERLAND, SEPTIMUS, M.D., M.R.C.S., L.R.C.P. Lond., *Physician to the Royal Hospital for Women and Children*, 155, Gloucester Road, South Kensington.
- 1885 SUTTON, RHODAS STANBURY, M.D., 419, Penn Avenue, Pittsburgh, U.S.A.
- F.F. SWAIN, W. PAUL, F.R.C.S., *late Surgeon Royal Albert Hospital, Devonport*, 17, The Crescent, Plymouth.
C. 1884-7.
- F.F. SWAYNE, JOSEPH GRIFFITHS, M.D. Lond., *Consulting Physician-Accoucheur, Bristol General Hospital*, 74, Pembroke Road, Clifton, Bristol.
V.P. 1886-8.
- F.F. *SWERNEY, MICHAEL PATRICK, L.R.C.S.I.
- 1888 SWEETNAM, LESSLIE MATTHEW, M.D., Toronto, Canada.

Elected.

- 1885 TADLOCK, A. B., M.D., Knoxville, Tennessee, U.S.A.
 F.F. TAIT, LAWSON, F.R.C.S., *Surgeon to the Birmingham and Midland Hospital for Women*, 7, The Crescent, Birmingham.
 V.P. 1884-6. Pres. 1886. C. 1887-9
- 1886 TAPSON, JOSEPH ALFRED, M.R.C.S. Eng., Holmwood, Clapham Common, S.W.
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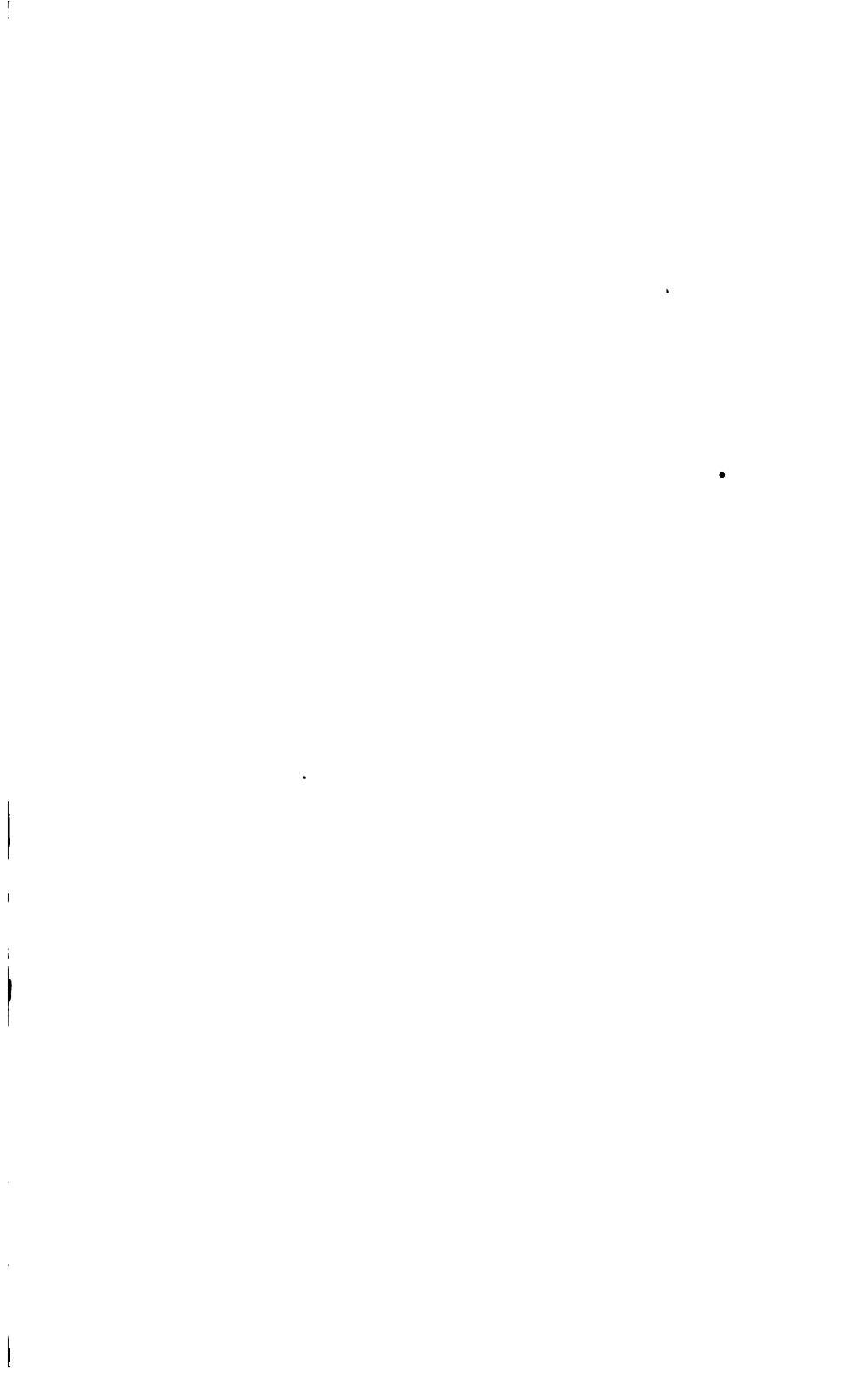
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